

A LEARNING TO LEARN CATALOG

Everything we learn is only real to the degree that it contributes to what we are. Direct knowledge of ourselves, the reality of the world we live in, and the facilitation of our inner growth and change are the ultimate goals of education. For the most part, self-knowledge has been limited to mysticism, psychoanalysis, and various beyond-the-fringe activities, and education has been limited to a culturally determined range of ideas and techniques. We have been estranged from the knowledge of ourselves; it is no wonder that we are left empty by the present educational process both in and out of school.

The BIG ROCK CANDY MOUNTAIN seeks to aid in the acquisition of this knowledge: not by molding the learner into a pre-established pattern, but by providing resources to help him quench his thirst; not by teaching meaningless stockpiling leading to a dissatisfied life, but by encouraging growth in the present leading toward a joyous old age; not by changing people, but by awakening a desire to change. This is our motivation for doing this catalogue.

An outlet is always needed to transform an idea from theory to reality. THE WHOLE EARTH CATALOGUE and Stewart Brand provided the prototype for the idea of BIG ROCK CANDY MOUNTAIN.

The title, BIG ROCK CANDY MOUNTAIN, was suggested by Peter Gould.

Thé Plowshare Community Booksellers provided us with many books which we used for research, reviews, and photographs.

The cover was designed by Ron Cooper.

RETAINING SUBSCRIPTIONS

Terry Borton Cambridge, Massachusetts

Bills Rees and Huckabee Associated Merchandising Corporation New York, New York

Stanley K. Sheinbaum Santa Barbara, California

James Robertson
The Amazing Life Games Company
Sausalito, California

Hendrik Gideonse Washington, D.C. John Burke Stanford, California Zomeworks Corporation Albuquerque, New Mexico Ruth Ann Wishik Brooktondale, New York

Frederick Mulhauser Watertown, Massachusetts

CONTENTS

PROCESS LEARNING

- 2 Education and the Significance of Life Mirrors, Messages, Manifestations
- 3 I Ching Tales of the Dervishes
- 4 Fantasy and Feeling in Education Reach, Touch, and Teach
- 5 Experimental and Quasi-Experimental Designs for Research Serious Games How to Design Educational Games Metaphorical Way
- 6 Teachings of Don Juan Centering Tao Te Ching
- 7 Syllabus of Survival Good Medicine
- 8 Teaching a Universe of Discourse Productive Thinking Program n-Ach
- 9 Zen and the Art of Photography Main Currents in Modern Thought Studies in Comparative Religion

EDUCATIONAL ENVIRONMENTS

- 10 Our Man Made Environment
- 11 Education Automation
 Harvard Education Review
 Architecture
 Envirom
- 12 Epoch
 The Free Learner
 Outward Bound
 The Wilderness School
- 13 New Schools Exchange
 This Magazine is About Schools
- 14 Farallones Institute
- 15 Cardboard Forms Cheap Materials
- 16 Cardboard Construction
- 17 Places Training
- 18 Super Carrel
- 19 Desks Geodesics Multi-board Plydome
- 20 Halls, Doors, Walls, Ceilings Playground Toy
- 21 Classroom Environment Inflatables
- 22 New Schools Manual Domebook One
- 23 Zome Works

CLASSROOM MATERIALS

- 24 The Web
- 25 Children and Their Primary Schools Informal-Open Education Perspectives on Plowden Postscript on Plowden Froebel and English Education
- 26 Where
 Ordering British Books
 Integrated Day in the Primary School
 Story of a School
- 27 Workshop for Learning Things Follow Through List
- 28 Trinome In The Early World Experiment in Education
- 29 The Bag, The Box, The Bin
- 30 Childcraft Catalog
 Creative Playthings
 Community Playthings
 Constructive Playthings
 Games and Puzzles
- 31 Computers in the Classroom
 Dietzgen Programmable Computers
 Busicom Calculators
 Computers and Automation
 Computerworld
 My Computer Understands Me
 Teletypes
 Mini Computers
- 32 Creative Publications Science Studies SEE
- 33 Cuisenaire Materials
 Freedom to Learn
 Nuffield Mathematics Project
- 34 Edmund Scientific
 Free Teaching Materials
 Ward's Catalog
 Denoyer-Geppert Catalog 70
- 35 Inquiry Development Program in Earth Science Elementary Science Study
- 36 Making It Strange
 The Art of the Possible
 Making It Whole
 Synectics Education System
 Synectics Basic Course
 Facts and Guesses
 Switch It On!
- 37 Man A Course of Study Geography in an Urban Age
- 38 Young Filmmakers
 A Guide For Film Teachers to Filmmaking
 by Teenagers
 Filmmaking in Schools
- 39 Films Made By Young People
 Media And Methods
 Films for Rent
 Free Films Ready for Borrowing

- 40 Teachers and Writers Collaborative
 Tell It Like It Is
 Match Kits
 The Center For Short-Lived Phenomena
- 41 Improvisations for the Theater
 The Art of the Puppet
 Marionettes A Hobby for Everyone
 The Puppetry Journal
 The Puppet Theater of the Modern World
 The Puppet Theatre Handbook
- 42 Play Therapy
 Anger in the Rocking Chair

HOME LEARNING

- 43 Infants and Mothers
 The Sufi Message of Hazrat Inayat Kahn,
 Volume 3 Education
- 44 Piaget Play, Dreams and Imitation in Childhood How to Raise a Brighter Child How Children Learn
- 45 Put Your Mother on the Ceiling Revolution In Learning Early Childhood Education Study Noumedia Tapes
- 46 Hatha Yoga
 Nutrition and Consciousness
- 47 Love and Orgasm
 T'ai Chi The "Supreme Ultimate" Exercise
 for Health, Sport and Self-Defense

SELF DISCOVERY

- 48 Toward a Psychology of Being
- 49 Gestalt Therapy Gestalt Therapy Verbatim In and Out the Garbage Pail
- 50 Psychosynthesis: A Manual of Principles and Techniques
 Ways of Growth Approaches to Expanding Awareness
- 51 The Teachings of Gurdjieff
- 52 Rep
- 53 The Encounter of Man and Nature Akroasis, Theory of World Harmonics
- 54 Through an Eastern Window Memories, Dreams, Reflections Bronze Oldies
- 55 Zip-adee do da, zip adee-ay
 - 6 Meatball

The BIG ROCK CANDY MOUNTAIN is published six (6) times per year by Portola Institute. Inc., 1115 Merrill Street, Menlo Park, California 94025: two big Catalogs — June and December — and four smaller informal issues — August, October, February, April. Subscriptions are \$8.00 per year. \$4.00 for single issues of June and December. \$1.00 for smaller August, October, February, and April issues. The Catalog was done on an IBM Selectric Composer, Polaroid MP-3 camera in the Whole Earth Catalog Production Garage. Printing by Nowels Publications,



EDUCATION AND THE SIGNIFICANCE OF LIFE

The tendency when reading this little book is to want to remember it word for word — that's how good it feels. But acceptance of any theory or dogmatic practice without real examination and understanding is one of the very things Krishnamurti warns us against — and rightly so. For our allowing others to make decisions for us is one of the major factors which has led us into the complex of socio-economic, political and personal traps we presently find ourselves in.

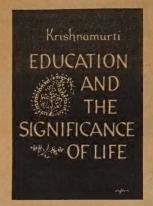
Krishnamurti discusses what he calls "right education" — an education which helps us experience integration of all life's complexities. "To understand life we must understand ourselves and that is both the beginning and the end of education." He encourages us to "step back" and observe ourselves and our actions from a detached perspective so that we become aware of why and how we operate.

For those who are teachers, Krishnamurti aims some penetrating but compassionate jabs: until we ourselves are clear of conditioning, or at least aware of the causes behind our actions, we can never help others to be free. You give what you live! We criticize the environment, we must be aware that we are the environment. "Existence is relationships," and all the problems we have are because we, and not they, have created them.

His insights with regard to belief and ideology, intellect and intelligence, are amazingly clear — almost embarrassingly so — as are his discussions of peace, ambition, nationalism and education. Krishnamurti doesn't just approach questions — he surrounds them, passing back and forth through them until we have examined every facet. In fact, one of the most discomforting things about this discourse is the gnawing frustration that he leaves you no argument.

The best thing I can suggest is that you read this book and judge for yourself. Get behind it and let it imprint its clarity on you; you'll probably be a whole lot better off.

(Reviewed by Ron Cooper)



Education and the Significance of Life Krishnamurti, 125 pp., 1953 \$3.00 from: Harper & Row 49 East 33rd Street New York, New York 10016

"We have separated intellect from feeling, and have developed intellect at the expense of feeling. We are like a three-legged object with one leg much longer than the others, and we have no balance. We are trained to be intellectual; our education cultivates the intellect to be sharp, cunning, acquisitive, and so it plays the most important role in our life. Intelligence is much greater than intellect, for it is the integration of reason and love; but there can be intelligence only when there is self-knowledge, the deep understanding of the total process of oneself.

"To be an integrated human being is to understand the entire process of one's own consciousness, both the hidden and the open. This is not possible if we give undue emphasis to the intellect. We attach great importance to the cultivation of the mind, but inwardly we are insufficient, poor and confused. This living in the intellect is the way of disintegration; for ideas, like beliefs, can never bring people together except in conflicting groups.

"Human beings must be integrated if they are to come out of any crisis, and especially the present world crisis, without being broken; therefore, to parents and teachers who are really intersted in education, the main problem is how to develop an integrated individual. To do this, the educator himself must obviously be integrated; so the right kind of education is of the highest importance, not only for the young, but also for the older generation, if they are willing to learn and are not too set in their ways. What we are in ourselves is more important than the traditional question of what to teach a child, and if we love our children we will see to it that they have the right kind of educators.

"An educator is not merely a giver of information; he is one who points the way to wisdom, to truth. Truth is far more important than the teacher."

"If the educator is to help the student to examine and understand the values that surround him and of which he is a part, must he not be aware of them himself? If one is blind, can one help others to cross to the other shore?"

"It is really extraordinary that, while people are rigorously trained to be doctors or lawyers, they may become parents without undergoing any training whatsoever to fit them for this all important task."

"It is constant inquiry, true dissatisfaction, that brings creative intelligence; but to keep inquiry awake is extremely arduous, and most people do not want their children to have this kind of intelligence, for it is very uncomfortable to live with someone who is constantly questioning accepted values."

"It is only by understanding the ways of our own thought and feeling that we can truly help the child to be a free human being; and if the educator is vitally concerned with this, he will be keenly aware, not only of the child, but also of himself."

Process Learning

MIRRORS MESSAGES MANIFESTATIONS

For one who wants to learn something about making (Greek, <u>poiein</u>) and being a maker — perhaps all that can be conveyed from a single source outside oneself — he must go to *Mirrors Messages Manifestations* and fill himself, learn all he can from it at every level, and then if he has the ability of <u>maker</u> in himself and wants to exercise it in whatever medium, it will come out the better: he will <u>make a sequence</u> also, and as it should be "the sequences are never finished" — nor is any man as long as he expends himself in real making.

Freedom. This is what it is all about, or it is about nothing for man. And man always seeks freedom from his first gasp and cry. What else is there?

White's work, an inspired book in every respect, represents the freedom and love and labor of a lifetime. One of his sayings — he would be too modest to admit it — applies supremely to himself:

"No matter how slow the film, Spirit always stands still long enough for the photographer It has chosen."

And in the study of this book one knows for whom the Spirit stood still; one knows whom It chose . . . Be free, and then do what you want.

What does it mean to be a creator, to be a maker in the true sense? First it means to align one-self: to hold oneself steady in the wind of life, and see where others merely notice or running, pass too fast to even notice. Next it means to wake up. To be awake means to taste the flavor of things all the way to the pulsebeat and on into the heart of things . . . then further. Again we can go to Minor White who early in his work had been "seized": "Surfaces reveal inner states—cameras record surfaces. Confronted with the world of surfaces in nature, man, and photographs, I must somehow be a kind of microscope by which the underlying forces of Spirit are observed and extended to others." (My italics.)

Yes, be free; yes, do what you want. But remember in <u>real</u> freedom Spirit in all its force and beauty is "extended to others" through the medium of the maker, and all men and women everywhere are fulfilled by it and left the richer. None are denied, none are injured, and revolution, overthrow, violence which some well-intending idiots have confused with real freedom for themselves and others is seen clearly for what it is — the act of blind men groping in a high explosive storage room with lighted torches.

Surfaces (structures, as this might be better named) provide the key to man's innermost being and are the most important link with the world itself as an extension of man. If anyone has ever wondered Why photographs? White's work will answer his question in an almost awesome way when it is "used" as it has been made to be. In short, photographs (some photographs when made by a master photographer like White who knows exactly what he is doing) X-ray the inner states of things and reveal to us the Why, Is-ness beneath appearances. "For it is in the most eminent degree the province of [real] knowledge, to contemplate the Why" (Aristotle, Posterior Analytics, I. 14. 79a23). We leave the merely What behind. We become the true camera; we survey man and the manifestations of Nature and ourselves and we see through our fleshly eye and with the Eye of Spirit, the most subtle Eye that is no eye. This is truly the function of all art in relation to man — both as maker and viewer — and no human being remains locked in the prison of his flesh when he comprehends and participates.

It remains to be said that an important (from the point of view considered here) biography, a creator's biography prepared mainly by Peter C. Bunnell with Minor White's help, caps this monumental work. The biography could well be subtitled "The Formation of a Maker," for it is filled with hints and clues and references arising from the formative core of White's life.

And one more thing about making: the book itself. Aperture under the direction of its managing editor Michael Hoffman put immense love and attention into the production of *Mirrors Messages Manifestations*. No detail of layout and production appears to have been overlooked; the typography, design, paper, printing — all form a unity complimenting and interlocking so that touch and eye and mind are satisfied fully.

(Suggested and Reviewed by Haven O'More)



Mirrors Messages Manifestations Minor White, 242 pp., 1969. \$35.00 from: Aperture, Inc. 276 Park Avenue South New York, New York

I CHING

The nature of transformation is our outstanding concern and the concern of the *I Ching*. This ancient Chinese text can be read at many levels of understanding, and is usually and traditionally referred to as an oracle. Actions are portrayed as processes of change and their results and consequences confront the doer of the action. It is a mirror which reflects not only oneself, but also the larger cycle in which one is involved.

19. Lin / Approach

above K'UN THE RECEPTIVE, EARTH below TUI THE JOYOUS, LAKE

The Chinese word lin has a range of meanings that is not exhausted by any single word of another language. The ancient explanations in the Book of Changes give as its first meaning, "becoming great." What becomes great are the two strong lines growing into the hexagram from below; the light-giving power expands with them. The meaning is then further extended to include the concept of approach, especially the approach of what is strong and highly placed in relation to what is lower. Finally the meaning includes the attitude of condescension of a man in high position toward the people, and in general the setting to work on affairs. This hexagram is linked with the twelfth month (January-February), when, linked with the twelfth month (January-February), when, after the winter solstice, the light power begins to ascend again.

THE JUDGMENT

APPROACH has supreme success.

Perseverance furthers.

When the eights month comes,

There will be misfortune.

The hexagram as a whole points to a time of joyous, hopeful progress. Spring is approaching. Joy and forbearance bring high and low nearer together. Success is certain. But we must work with determination and perseverance to make full use of the propitiousness of the time. And one thing more: spring does not last forever. In the eighth month the aspects are reversed. Then only two strong, light lines are left; these do not advance but are in retreat (see next hexagram). We must take heed of this change in good time. If we meet evil before it take heed of this change in good time. If we meet evil before it becomes reality — before it has even begun to stir — we can master it.

THE IMAGE

The earth above the lake: The image of APPROACH. Thus the superior man is inexhaustible In his will to teach, And without limits In his tolerance and protection of the people.

TALES OF THE DERVISHES

The Sufis are an ancient group who have been concerned specifically with teaching in its broadest sense for thousands of years. They differ from most teaching groups in that they stress that particular bits of information or particular techniques are only useful at particular points in time or on given people. They differ from most other systems in that they stress that the intellect is only one means to knowledge and must find its rightful place in an organized whole. Until the stress that the intellect is only one means to knowledge and must find its rightful place in an organized whole. Until the stress of the str like other systems called mystical or esoteric, the aims of the Sufis are just as much to improve the lot of 'ordinary' man as it is to teach in another dimension. Their teaching takes many forms, it is held to lie behind those of Jesus, Zen, Yoga, the Tarot, etc. The teaching can exist as music, painting, carpet weaving, etc. This book contains stories which are held to contain some of this Teaching. The contrast between ordinary learned man and the Sufi is seen in this story.

(Suggested and Reviewed by Bob Ornstein)

One dark night a dervish was passing a dry well when he heard a cry for help from below.

'What is the matter?' he called down.

'I am a grammarian and I have unfortunately fallen, due to my ignorance of the path, into this deep well in which I am all but immobilized,' responded the other.

'Hold, friend, and I'll fetch a ladder and rope,' said the der-

'One moment, please!' said the grammarian. 'Your grammar and diction are faulty; be good enough to amend them.'

'If that is so much more important than the essentials,' shouted the dervish, 'you had best stay where you are until I have learned to speak properly.'

And he went his way.

The Grammarian and the Dervish

The earth borders upon the lake from above. This symbolizes the approach and condescension of the man of higher position to those beneath him. The two parts of the image indicate what his attitude toward these people will be. Just as the lake is inexhaustible in depth, so the sage is inexhaustible in his readiness to teach mankind, and just as the earth is boundlessly wide, sustaining and caring for all creatures on it, so the sage sustains and cares for all people and excludes no part of humanity.

THE LINES

Nine at the beginning means:

Joint approach.

Perseverance brings good fortune.

The good begins to prevail and to find response in influential circles. This in turn is an incentive to men of ability. It is well to join this upward trend, but we must not let ourselves be carried away by the current of the time; we must adhere perseveringly to what is right. This brings good fortune.

Nine in the second place means:

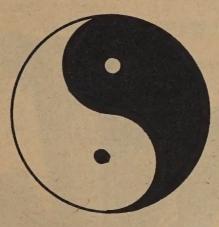
Joint approach.

Good fortune.

Everything furthers.

When the stimulus to approach comes from a high place, and when a man has the inner strength and consistency that need no admonition, good fortune will ensue. Nor need the future no admonition, good fortune will ensue. Nor need the future cause any concern. He is well aware that everything earthly is transitory, and that a descent follows upon every rise, but need not be confused by this universal law of fate. Everything serves to further. Therefore he will travel the paths of life swiftly, honestly, and valiantly.

Six in the third place means: Comfortable approach. Nothing that would further. If one is induced to grieve over it, One becomes free of blame.





One day the great Sultan Mahmud was in the streets of Ghazna, his capital. He saw a poor porter struggling under the weight of a heavy stone which he was carrying on his back. Moved by pity for his condition and unable to re-strain his compassion, Mahmud called out to him, in royal command:

'Drop that stone, porter.'

Immediately he was obeyed. The stone lay there, an obstacle to all who tried to pass, for years on end. Ultimately a number of citizens interceded with the king, asking him to give a command for the stone to be taken away.

But Mahmud, reflecting in administrative wisdom, felt himself bound to reply:

'That which has been done by command cannot be rescinded by an equal command, lest the people think that imperial orders are motivated by whims. Let the stone re-

The stone remained, therefore, for the rest of Mahmud's lifetime. Even when he was dead, from respect for royal commands, it was not moved.



The I Ching or Book of Changes Wilhelm/Baynes, 740 pp., 1969 \$6.00 from: Princeton University Press Princeton, New Jersey

Things are going well for a man: he achieves power and influence. But in this lies the danger that he may relax, and confident of his position, allow the easygoing, careless mood to show itself in his dealings with other people. This would inevitably be harmful. But there is possibility of a change of mood. If he regrets his mistaken attitude and feels the responsibility of an influential position, he frees himself of faults.

Six in the fourth place means:

Complete approach.

While the three lower lines indicate rise to power and influence, the three upper lines show the attitude of persons in higher position toward those of lower rank for whom they procure influence. Here is shown the open-minded approach of a person of high rank to a man of ability whom he draws into his own circle, regardless of class prejudice. This is very favorable.

Six in the fifth place means:

Wise approach.

This is right for a great prince.

Good fortune.

A prince, or anyone in a leading position, must have the wisdom to attract to himself people of ability who are expert in directing affairs. His wisdom consists both in selecting the right people and in allowing those chosen to have a free hand without interference from him. For only through such self-restraint will he find the experts needed to satisfy all of his requirements. requirements.

Six at the top means: Greathearted approach. Good fortune. No blame.

A sage who has put the world behind him and who in spirit has already withdrawn from life may, under certain circumstances, decide to return once more to the here and how and to approach other men. This means great good fortune for the men whom he teaches and helps. And for him this greathearted humbling of himself is blameless.

The story was well known. People took its meaning in one of three ways, each according to his capacity. Those who were against rulership considered that it was an evidence of the stupidity of authority trying to maintain itself. Those who revered power felt respect for commands, however inconvenient. Those who understood gright penetrated the who revered power felt respect for commands, however inconvenient. Those who understood aright penetrated the moral intended by the king, regardless of his reputation among the unheedy. For, by causing to be placed in that inconvenient position an obstacle, and giving currency to his reasons for leaving it there, Mahmud was telling those who could understand to obey temporal authority, but to realize that those who rule by inflexible dogma cannot be of complete use to humapkind of complete use to humankind.

Those who read the lesson therefore swelled the ranks of the truth-seekers, and many thus found their way to Truth.

The Limitations of Dogma



Tales of the Dervishes Idries Shah, 221 pp.,1967 E.P. Dutton & Co., Inc. 201 Park Avenue South New York, N.Y. 10003

FANTASY AND FEELING IN EDUCATION

Dick Jones is the kind of lovable, lonely cat who was using groups-in-classrooms ten years ago as a vehicle for self-knowledge and emotional growth, who has done years of solid work on dreams and fantasies and education, who was digging the sexiness of unrepressed adolescence before Edgar Freidenberg (The Vanishing Adolescent) was, who has super-turned-on thousands of students at Brandeis, UC/Santa Cruz, and Harvard — and who can still write a very dull book. Yet there is much here for those who have fantasies and feelings about fantasies and feelings in education.

It is a curious book, hooked to the attempt during the 1960's of a number of heavy educators to develop a whole new approach to social studies in elementary schools. It is a psychologist's book by a man whose spirit and soul and free-loving nature are almost lost in the formal rhetoric of the side of psychology which maintains - even now - a strict allegiance to neo-Freudians like Erik Erikson.

Jones was one of those working on the "new" social studies and the book is a polemic against the immensely powerful Jerome Bruner of Harvard who dominated the work, Bruner the famed explorer of children's rational growth, who "discovered insights about changes children go through without taking 'the next step' of accepting children's emotions."

Both Bruner and Jones have made the long, long march through Western intellectual-scientific rigorous consciousness. Both have marched through the earlier decades of American pedantic psychology; both have used psychology to arrive at the a-mazing discovery that "children can learn anything they want to." Yet it is Jones who pokes out further beyond the culture's shell to realize that behind every idea is a feeling, that from feelings come synthesis, that the control of feeling is a limitation of logic rather than a necessary aspect. Startling views for a man who believes himself a scientist.

And a useful idea for public school teachers struggling to "free-up classrooms" and be "innovative." This book is first of all for them, for those involved in the desperate, perhaps futile attempt to include feelings into public schools <u>along with</u> intensity, efficiency and quantities of hard data that have characterized American schools at least since Sputnik. This is almost a how-to handbook on how to use such emotion-producing "ma-

Fantasy and Feeling in Education R.M. Jones, 276 pp., 1968 \$1.95 * from: Harper & Row 49 East 33rd Street New York, New York 10016



terial" as penises, bloody hunting scenes, infanticide, etc. Bruner got it in there, and advocated using it to gain concepts, logical and objective; Jones spotlights the emotions such material produces and rightly wonders how on earth teachers (not kids!) will handle it.

For those in Summerhillian free schools, or who regard "acculturation" as stepping aside and letting the children get it on (rather than Transmitting Knowledge), this book and Jones' stance will be difficult, puzzling, but still a gold mine of ideas between the lines. There are ideas on mapping emotions in groups of children, on the use of analogies to channel emotions, on handling the inevitable desire to control when emotions a-

The book might be especially useful to those straddling the fence (or chasm) between cultures — for example those children who have spent years in public schools and are then switched to the freedom of a Summerhillian alternative. Such children need something other than total freedom on the one side, or a heavy controlled curriculum on the other. They need a kind of depressivition a reavaluation as clearing of the a kind of de-pressurization, a re-awakening, a clearing of the decks — a kind of therapy in which the emotions, one's $\underline{\text{own}}$ unique emotions, are connected to ideas and concepts, even

But the new generation of kids from street-fighting parents

If you need arguments as you develop alternatives within the culture, if you are attempting to change the culture's educa-tional systems, if you can stand the old timey academic quasi-Freudian rhetoric ("conceptual containers in which to store things"), if you dig comparing how the intellectual Establishment laboriously evolves into the New Way without growing up on TV, using dope, or Esalen – and still gets there! – you'll gain pleasure, insights, and a launching pad for moon myths and dream trips from this book.

(Reviewed by Robert G. Greenway)

REACH, TOUCH, AND TEACH

Terry Borton's main ideas in Reach, Touch, and Teach - that learning must be personalized; linked to the personal lives, problems and feelings of students — will be of interest to all teachers. The fact that he believes that public schools "should legitimize these feelings" may give the more cynical alternative school teachers among us some concern. However, his approaches (perhaps a sulled to five sortest) should be some concern. proaches (perhaps pulled out of his context) should be of use to the freest of Summerhillian schools.

His thesis is simple: without the personal connection, education "is simply training in an irrelevant accumulation of facts and theories — irrelevant because it is not related to what students feel is important."

One of the things which makes the book extremely helpful is the autobiographical approach which enables the reader to <u>feel</u> the problems and rejoice with the classes when solutions become possible. He has a vision of making school a place where students are able to form their own education. Once people's real concerns can be expressed, they have space - to learn what's relevant to them, instead of what's relevant to an abstract, idealized youth. "A relevant curriculum generates alternatives for students and alternatives are a prerequisite for freedom." However, he seems to speak equally to those who freedom." However, he seems to speak equally to those who advocate "freedom" in classroom and those who seek structure - he intentionally turns the human information processing system back on itself and thus increases the students' understanding of the process through which he learns. This freeing up of space helps in guiding the group toward the vast resources of their peers — "Every classroom has 30 teaching machines, all they need is to be plugged into each other.

What really turned me on the most was Terry Borton's use of white ready turned the office index was refly softens use of his basic classroom approach as the model for this book. "It provides an organized way of increasing awareness (what), evaluating intention (so what), and experimenting with new behavior (now what)." The reader becomes a part of the process and thus really learns with the book as form.

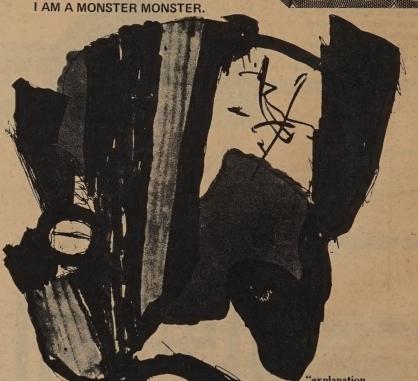
Of course, before any of this can work anywhere - free context, or whatever - it all must happen somehow to the teacher first. In other words, for an education expanded to include real human feelings, teachers must be fully actualized people themselves. "The goal of the teacher should be to help each student constantly increase his understanding of his feelings and expand that self-awareness by utilizing the vast intellectual resources available to man."

A beautiful thought shared by one of his students says it all so well: "I feel more spongy, like I have a new interest in things: ballet, opera, art galleries, 15 million wonderful ways — there's a door opening somewhere in me, I can feel the key in the lock now.

(Reviewed by Salli Daniels)

"The Monster Monster allows the child to follow someone else, the monster, through the process of conscious self-examination. But as the monster begins asking for the child's help, the two draw closer together. What begins as a book about the monster's problem ends with the child beginning to think about what makes a monster a monster and what difference there is between a monster and a man or between a monster and himself

and himself.
"The Monster Monster lesson follows the What, So What, Now What sequence:



Monster Monster is one of twenty beginning readers designed to combine reading exercises with stories that speak directly to "student concerns." The picture is one drawn by Terry Borton's son. The text is Terry's.

Reach, Touch, and Teach Terry Borton, 213 pp., 1970 * from:

McGraw-Hill Book Company c/o Trade Order Service Dept. Princeton Road Hightstown, New Jersey 08520

8171 Redwood Highway Novato, California 94947



book lines

I AM A MONSTER. I AM A BIG MONSTER. I AM A MONSTER MONSTER.

BUT I DON'T WANT TO BE A MONSTER MONSTER. I DON'T WANT TO BE A MON-STER AT ALL. NOBODY LIKES A MONSTER. I WANT TO BE LIKED. KIDS ARE LIKED. I WANT TO BE A KID!
I WANT TO BE A KID
LIKE YOU.

YOU ARE NOT A MONSTER ARE YOU? NO! YOU ARE A KID. I CAN BE AS SMALL AS A KID. BUT THEN WHAT DO I DO? WHAT DO I DO TO BE A KID LIKE YOU? LIKE YOU?

explanation

Immersion in the experience of being a monster, which in itself requires reorientation.

So What

Contemplation—has anyone heard of a monster who didn't want to be a monster?

The monster analyzes his state and compares his life with that of the child reading the book. The child becomes involved in the same process, particularly if a teacher encourages him to think about what the monster is saying.

Now What

The monster experiments with a new way of being. The child is now asked to choose for the monster another experiment in action which will make him more like a kid. In this process the kid is also beginning to analyze just what is human within himself and to start the What Sa What Now What the What, So What, Now What the what, So what, Now what process over again on a more personal basis. One excellent way to do this is to have the student make himself physically "look like a monster" and then slowly turn himself back into a kid, observing the changes as he relaxes his muscles and softens the lines of his face.

"One of the great advantages of books like Monster Monster is that they are indirect while still being explicit. That is, the focus of attention is not directly on the kid, but on the monster, yet the book deals with the basic concerns of the young child in a very immediate way. The more direct a lesson, the more threatening it may be. Take it easy. A direct attack on concerns requires digging down into the child's soul in order to be effective, and that is not a job for a teacher. A process emphasis keeps the attention on the general processes which all people use, is much less threatening to the child, and is much easier for the teacher to handle."

EXPERIMENTAL AND QUASI-EXPERIMENTAL DESIGNS FOR RESEARCH

A lot of teachers in the field get ideas for changing or improving techniques or materials, and would like to be able to compare the effects of their approach to "standard" or alternate methods. Campbell and Stanley is the standard reference for the design of experiments in education. It's not very technical, and will save time, money, and a lot of wasted effort.

(Reviewed by Peter Lynn Sessions)

"In presenting the experimental designs, a uniform code and graphic presentation will be employed to epitomize most, if not all, of their distinctive features. An X will represent the exposure of a group to an experimental variable or event, the effects of which are to be measured; 0 will refer to some pro-cess of observation or measurement; the Xs and Os in a given row are applied to the same specific persons. The left-to-right dimension indicates the temporal order, and Xs and Os vertical to one another are simultaneous. To make certain important distinctions, as between Designs 2 and 6, or between Designs 4 and 10, a symbol R, indicating random assignment to separate treatment groups is necessary. This randomization is conceived to be a process occurring at a specific time, and is the all-purpose procedure for achieving pretreatment equality of groups, within known statistical limits..."

"Note, however, that many aspects of teaching on which one would like to experiment may very well have effects limited for all practical purposes to the period of actual presence of X. For such purposes, this design might be quite valuable. Suppose a teacher questions the value of oral recitation versus individual silent study. By varying these two procedures over a series of lesson units, one could arrange an interpretable experiment. The effect of the presence of a parent-observer in the classroom upon students' volunteer discussion could be studied in this way. Awareness of such designs can place an experimental testing of alternatives within the grasp of an individual teacher. This could pilot-test procedures which if promising might be examined by larger, more coordinated experiments."

Experimental and Quasi-**Experimental Designs** For Research Campbell, Stanley, 78 pp., \$2.75 * 1969

Rand McNally and Company P.O. Box 7600 Chicago, Illinois 60680



SERIOUS GAMES

HOW TO DESIGN EDUCATIONAL GAMES

As the interest has grown in using games in the classroom, so has the need to understand and develop their potential as learning materials. Clark Abt and Ray Glazier have been working with simulation games through Abt Associates' Game Central, in Boston. In their books they approach the relevance of games as educational tools. Abt concentrates on the learning processes, and Glazier describes the thinking that goes into making a game.

The games simulate real situations — historical, scientific, sociological — and are action oriented. They are serious because they have a carefully thought-out educational purpose. "Serious Games combine the analytic and questioning concentration of the scientific viewpoint with the intuitive freedom and rewards of imaginative, artistic acts.

In each game the students are asked to solve problems; for instance, colonizers trying to develop their new land and resources versus the mother country which needs revenue to pay troops to their new land and resources versus the mother country which needs revenue to pay troops to protect the colonizers against Indians, and to pay government agencies to regulate the colonies. Each team is challenged to find ways to beat the other — escaping taxes and developing fool-proof ways of collecting them. The levels of learning are varied. Some students may want to do extra reading, or study economics, geography, etc. Other students may prefer to play the game with the information that is provided.

The teacher's relationship with the students changes. He becomes a resource consultant — to explain the rules — to present new problems and complications — to give extra learning materials as they are requested. The teacher is from the record individually to the kidd' needs and to

rials as they are requested. The teacher is freer to respond individually to the kids' needs and to observe how they are learning.

Abt's and Glazier's thoughtful treatment of their materials persuades us of the expansive learning methods brought forth through problem solving simulations.

WHERE TO FIND OUT ABOUT EXISTING GAMES

Mrs. Audrey Suhr, Field Director Academic Games Associates Center for Study of Social Organization of Schools The Johns Hopkins University Baltimore, Maryland 21218 Parent-Child

Democracy Life Career Consumer Community Response **Economic System**

cience Research Associates Inc. 259 East Erie Street Chicago, Illinois 60611

Inter-Nation Simulation Education Games Extension American History Games

Visite ... Nova Schools Academic Games Project
Division of S. Florida Education Center 3600 S.W. 70th Street Fort Lauderdale, Florida

Propaganda **Equations**ON SETS Real Numbers Game

TEN STEPS OF GAME DESIGN

- Define overall objectives (teaching, analysis, design, test, exploration, etc.). 1.
- 2. Determine scope (duration, geographic area, issues).
- Identify key actors (individual groups, or organizations making the critical decisions).
- Determine actors' objectives (power, wealth, influence, etc., in specific contexts).
- Determine actors' resources (physical, social, economic, political, information).
- Determine the interaction sequence among the actors (flow of resources and information
- Determine the decision rules or criteria on the basis of which actors decide what resources and information to transmit or receive and what actions to take.
- Identify external constraints on actions of the actors (such as no violence being permitted in a competition among Quakers).
- Formulate <u>scoring rules</u> or <u>win criteria</u> on the basis of the degree to which actors or teams of actors achieve their objectives with efficient utilization of resources.
- Choose form of presentation and manipulation (board game, role play, paper/pencil exercise, computer simulation), and formulate sequence of operations.

How to Design **Educational Games** Ray Glazier, 23 pp., 1969 \$1.00 from: Abt Associates Inc. 55 Wheeler Street Cambridge, Massachusetts 02138

> **Project Simile** Western Behavioral Sciences Institute 1121 Torrey Pines Road La Jolla, California 92037

Inter-Nation Simulation **Business Management Game** Napoli Plans

Serious Games Clark Abt, 176 pp., 1969 \$5.95 * from: The Viking Press 625 Madison Avenue New York, New York 10022

> Games Central 55 Wheeler Street Cambridge, Mass. 02138

Culture Contact Edplan Grand Strategy Relationships Simpolis (inquiry referrals)

METAPHORICAL WAY

Learning and creativity both rest on the ability to make connections. The mind stretches and discovers a link between two things, revealing a meaning not previously seen. The separate pieces of experience come together, and we glimpse the wholeness of the universe. We sense that what we experience as fragmented bits of knowledge are part of an integrated whole.

The powerful tools which enable us to make connections are metaphors and analogies; and since they are tools, it is possible to learn to use them well and to make them work for us. The Metaphorical Way describes an approach to education which does just that.

The Synectics approach is based on twenty years of research in the area of the creative process. In the last several years, the author, William J. J. Gordon, has widened his concern to include the use of metaphor in learning as well as creativity. In The Metaphorical Way he describes the metaphorically based learning materials he's developed and discusses the theory on which they're based. The book is very concrete and full of examples. It is intended to serve as a sort of teachers' guide to Synectics materials as well as an introduction to the theory. While the book is aimed at teachers, it contains some excellent material on metaphorical thought which should also interest non-teachers. Many of the teaching materials that are included are so fascinating that you're apt to find yourself doing

The range of materials is fantastic. Gordon has applied the Synectics approach to just about every subject area, including music and shop. He also discusses the use of metaphorical materials with unmotivated and inner city students and the application of metaphor to sensitivity-type group processes.
The Synectics classroom materials which Gordon describes are reviewed separately on page 36 of this catalog.

Anyone interested in the Synectics approach might also enjoy reading Gordon's earlier book, *Synectics*, which describes the process he and his colleagues developed for increasing the creative output of groups. It's available in paperback at \$1.25, published by Collier Books.

"Observations of people learning (from sophisticated scienobservations of people rearining (from sophisticated scrietists to underpriviliged students) strongly suggest that learning (or discovery) is closely related to creativity. The Synectics hypothesis about creative thought applies directly to learning.

1. Learning efficiency in people can be increased markedly if they understand the psychological processes by which they operate.

- 2. In learning process the emotional component is as important as the intellectual, the non-rational as important as the rational.
- 3. These emotional and non-rational elements can and must be engaged in order to increase the probability of successful learning.

"That which is in the 'back of our mind' or, as Synectics refers to it — the preconscious — is potent stuff; the stuff of which dreams are made, the stuff from which ideas are made. . . . Synectics tries to evoke the preconscious and watch it at work. This technique encourages students to oscillate between a highby rational consideration of the real problem and a continuing search for the personal, experience-based, non-rational analogies related to the problem. In this way, the student widens the scope of his search for an understanding in depth instead of narrowing that scope by highly logical methods. . . Obviously, an additional rationale for the analogical approach is that it's actually fun. Students are stimulated when they are excited and encouraged when they produce original ideas related to significant subject matter."

"The most important element in the creative process is Making the Familiar Strange, because scientific breakthroughs as well as visual and literary innovations depend on 'strange' new contexts by which to view a familiar world. . . . On the other hand, the most important element in learning and understanding is Making the Strange Familiar because understanding requires bringing a strange or new concept into a 'familiar' context."

"AS TOUGH AS WATER - Part I

Be-The-Thing. Imagine that you are a great rock. You are afraid of nothing. You are so strong that the wind and rain can't even scratch you; although during thousands of years they have worn away lesser rocks. However, one day, toward winter, a harmless drop of water trickles its way deep into one of the cracks with which you were born. Having withstood the onslaught of floods and hurricanes through the ages, what is your attitude toward this tiny drop of water?'

"That night the temperature falls below 32°. The drop of water freezes. In freezing, it expands and hurts you. Nothing before in your life has been able to even mark you. How do you feel as the drop of water expands and cracks you in two?"

The Metaphorical Way of Learning and Knowing W. Gordon, 220 pp., 1970 \$12.50 pre-paid Synectics Education Systems 121 Brattle Street Cambridge, Massachusetts 02138

THE TEACHINGS OF DON JUAN

Carlos Castaneda was a graduate student in anthropology at UCLA. During his field work he met don Juan, a Yaqui Indian "Man of knowledge". Castaneda entered a five year discipleship and this book recounts his extra-ordinary experiences and the teachings of don Juan.

Don Juan brought Castaneda through "the crack between the worlds" and with the aid of peyote, Jimson weed, and mushrooms introduced him to the world of "non-ordinary reality". Don Juan's wisdom and power are unquestionable; he shows us an order of reality we think inconceivable. That's where we are caught — between the unquestionable and the unbelievable.

These quotes concern the way of learning and the first (less terrible) steps on the path to becoming a man of knowledge.

As a venerable old sage once said, "This book may affect you more than you wish to be af-

"Last night don Juan proceeded to usher me into the realm of his knowledge. We sat in front of his house in the dark. Suddenly, after a long silence, he began to talk. He said he was going to advise me with the same words his own benefactor had used the first day he took him as his apprentice. Don Juan had apparently memorized the words, for he repeated them several times to make sure I did not miss any:

'A man goes to knowledge as he goes to war, wide-awake, with fear, with respect, and with absolute assurance. Going to knowledge or going to war in any other manner is a mistake, and whoever makes it will live to regret his steps.'

"'... Is there a special way to avoid pain?'

"'Yes, there is a way.'

"'Is it a formula, a procedure, or what?'

"It is a way of grabbing onto things. For instance, when I was learning about the devil's weed I was too eager. I grabbed onto things the way kids grab onto candy. The devil's weed is only one of a million paths. Anything is one of a million paths [un cammo entre cantidades de caminos]. Therefore you must always keep in mind that a path is only a path; if you feel you should not follow it, you must not stay with it under any conditions. To have such clarity you must lead a disciplined life. Only then will you know that any path is only a path, and there is no affront, to oneself or to others, in dropping it if that is what your heart tells you to do. But your decision to keep on the path or to leave it must be free of fear or ambition. I warn you. Look at every path closely and deliberately. Try it as many times as you think necessary. Then ask yourself, and yourself alone, one question. This question is one that only a very old man asks. My benefactor told me about it once when I was young, and my blood was too vigorous asks. My benefactor told me about it once when I was young, and my blood was too vigorous for me to understand it. Now I do understand it. I will tell you what it is: Does this path have a heart? All paths are the same: they lead nowhere. They are paths going through the bush, or into the bush. In my own life I could say I have traversed long, long paths, but I am not anywhere. My benefactor's question has meaning now. Does this path have a heart? If it does, the path is good; if it doesn't, it is of no use. Both paths lead nowhere; but one has a heart, the other doesn't. One makes for a joyful journey; as long as you follow it, you are one with it. The other will make you curse your life. One makes you strong; the other weakens you.'

"'When a man starts to learn, he is never clear about his objectives. His purpose is faulty; his intent is vague. He hopes for rewards that will never materialize, for he knows nothing of the hardships of learning.

"'He slowly begins to learn — bit by bit at first, then in big chunks. And his thoughts soon clash. What he learns is never what he pictured, or imagined, and so he begins to be afraid. Learning is never what one expects. Every step of learning is a new task, and the fear the man is experiencing begins to mount mercilessly, unyielding. His purpose becomes a battlefield.

"And thus he has stumbled upon the first of his natural enemies: Fear! A terrible enemytreacherous, and difficult to overcome. It remains concealed at every turn of the way, prowling waiting. And if the man, terrified in its presence, runs away, his enemy will have put an end to his quest.'

"'What will happen to the man if he runs away in fear?'

" 'Nothing happens to him except that he will never learn. He will never become a man of knowledge. He will perhaps be a bully, or a harmless, scared man; at any rate, he will be a defeated man. His first enemy will have put an end to his cravings.

" 'And what can he do to overcome fear?'

"The answer is very simple. He must not run away. He must defy his fear, and in spite of it he must take the next step in learning, and the next, and the next. He must be fully afraid, and yet he must not stop. That is the rule! And a moment will come when his first enemy retreats. The man begins to feel sure of himself. His intent becomes stronger. Learning is no longer a terrifying task.

"'When this joyful moment comes, the man can say without hesitation that he has defeated his first natural enemy.

(Reviewed by Virdone)

The teachings of Don Juan Castaneda, 276 pp., 1968 \$0.95 * from: Ballantine Books, Inc. 101 Fifth Avenue New York, New York 10003



CENTERING IN POTTERY, POETRY, AND THE PERSON

Faith in what is bigger than any one of us and lives in each of us. The discipline of centering. A year ago, M. C. Richards' voice was one of the forces pushing me toward the potter's craft, beyond the idiocy of choosing "what to do" on the basis of how I was different from others. Moving through her book with her I connected once again with a voice in myself that I recognize by its lack of pretense. A twist in perception: from seeing myself on stage to seeing the whole shabang as a stage, and me there along with everybody else. Now I have made a few pots and continue to listen for poems: potentia. Mary Richards affirms the truth of organism, lays out the process in such a way that we hook up to her as body-person, and to ourselves as bodyperson. Life centered. Thunder-jump, I am the ancient root.

'There ain't no hidin' place down here; we color the atmosphere by our presence in it."



'The imagery of centering is archetypal. To feel the whole in every part."

To educate is to draw out, to lead out. In some sense, then, we must be in!"

"How do we perform the CRAFT of life, <u>kraft</u>, <u>potentia?</u> <u>Potentia</u>, like so many other words, has had its meanings separated out, and has come, in our day, to be both <u>potency</u> and <u>potentiality</u> — that is to say, both the power present and the power latent, that can but has not yet come into being. In Latin these are the same word. And this is a wisdom."

"Language is alive in the center from which the poet draws. It has its bright blood and call still upon it. It has not become a symbol nor an abstraction nor a concept merely. It thrills in the breath like any tongue or banner. You cannot <u>feel</u> that life by thinking about it. You can feel it only by waking into it as into a dream."

(Reviewed by Genny Wilson)

Centering M.C. Richards, 159 pp., 1964 \$2.45 from: Weslevan University Press Middletown, Connecticut 06457

TAO TE CHING

i write reps:

when i forget the tao let me remember a waterfall through falls, rapids, splashes it still flows

reps writes me:

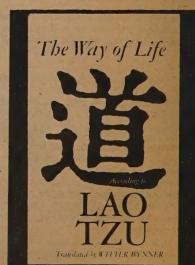
waterfall was given me then no trouble at all

> to stand under a waterfall helps to wash away shortcomings let me so stand

then I may re-member tao

Lao-tzu writes us:

"Rid of formalized wisdom and learning People would be a hundredfold happier, Rid of conventionalized duty and honor People would find their families dear, Rid of legalized profiteering People would have no thieves to fear.
These methods of life have failed, all three, Here is the way, it seems to me: Set people free As deep in their hearts they would like to be, From private greeds And wanton needs."



The Way of Life according to Laotzu Witter Bynner translation Capricorn Books 76 pp., 1944 \$0.95

from: 200 Madison Avenue New York, New York 10016



GDSD NEMCHE

To understand the real meaning of the term GOOD MEDICINE, One

must first realize the importance of the spiritualism that can be found in everything Natural. It is

thus that People living in Nature can make a religion of their daily lives. GOOD MEDICINE means a Positive Spiritual Life. GOOD MEDICINE means realizing that there is more

to Life than meets the eye. Belief in GOOD MEDICINE is one answer to the need that People in Nature find for expressing their humbleness to all that surrounds them.

"To YOU, the reader, this book presents a Way of Living a Life which is thoroughly inspired by the Ways that were followed by the Old Ones who once lived in our Mountains, swam in our Rivers, and hunted on our Plains. These Old Ones have moved on - - - - their Lands have changed - - - - their Ways have been neglected.

"NOW! A new People are Seeking new Ways. Experiences must Guide them. Let this book be, for You, an Experience. Let it help You Find A New Way."

The sections in this book include:

Freedom in Nature Brave Buffalo's Dream Pipe Smoking Sweat Bathing Tipi Notes Old-Time Moccasins Fur Caps Cabin Notes Beading Your Own Place Relevant Addresses Nature's Foods Grandma

Thoughts of Wisdom

Awareness that Others give Us spiritual Power.
Those others, We know Them through Our Old Man,
Our Old Man; He guides Us where We go;
We go where We can All be together,
We go where We can be just what We are.

"I have a song to sing, To sing because We are All here;

We have the Power, My Woman and I,

We have the Power in Our Family; We have the Power of Awareness,

We are All here as One,

The One makes us All.

With Our eyes far ahead, with Our steps big, We can step over all obstructing logs; Those logs, We just use them for Our fire, Our fire that lights the way to where We Are."

Good Medicine
Adolf Hungry Wolf, 1970
\$1.50
from:
Good Medicine Books

Golden, British Columbia

Box 1424



SWEAT BATHING

"Sweat lodges were used by most native tribes. Many people today still take regular 'sweats.' The expulsion of dirt and germs through profuse sweating literally causes the removal of evil from the body. The plunge into cold water afterward serves to awaken both Mind and body. A 'sweat' is a most profound spiritual experience — — one that must be felt.

"The sweat lodge is a small, round hut whose thick layer of coverings serves to keep the steam from heated rocks within. A typical sweat lodge is about eight feet deep and six feet wide."



SYLLABUS OF SURVIVAL

This is the syllabus of the Adventure Trails Survival school. For those of us that learned our camping/survival from the Boy Scout Handbook, this is a much better way of passing on this knowledge to our kids. This pamphlet is a synthesis of the practical skills of camping/survival and the practical skills of living a centered life. It compares in many ways to Zen and the Art of Archery. T.D. Lingo, the author, shares the truth that as the "mountain Man" becomes centered, his skills become perfected, and vice versa. Understanding, information (skills) and Knowledge, is the goal.

It is a most peculiar piece of writing but one which I feel is worth reading. He speaks of Gestalt perception, LSD realizations, yin-yang, energy flow, first principles, the right path, but always in relation to the students' growth in becoming at-one with the natural environment. The first section in particular I feel to be the work of a master in all senses of the word.

In following sections, Lingo gets a little heavy on the masculine development trip (we assume from the sense of the writings that there are no women there) as a means of building self-confidence. He always is careful to temper this with comments about sensitivity and 'agape' male love.

To me, the book seems to be a beautiful attempt to formulate all those truths which I get glimpses of whenever I camp. Lingo has made these truths into a system of process education which gradually unfolds before the eyes of the awakening "city slicker" as he becomes a mountain man.

"There are three prime classes of Mountain Men citizens, and a 4th hanging suspended between heaven and hell:

Class-I: Those who see all; Golden;

Class-II: Those who see much when they are shown; Silver

Class-III: Those who cannot see much now, but will some day; Bronze

Then there is the great slurry of mankind: Those who do not see now and never will; the walking dead in the living hell of the city, breathing in the stench and fumes as a Goodness, hearing in the rising roar to deafness as a Truth, seeing in the neon scream as a Beauty.

See what? For a Mountain Man to see is to perceive the vision of coming Self-maturity: The total integration of Self and Life harmonized into a unity of existence pursuing a never-ending expansion of consciousness over the bridge of Knowledge to yield greater and greater joy and meaning within this one-time-only Gift of Life."

"Throughout this syllabus, you will be caressed relentlessly by one recurring idea: that Life is good and is the only subject taught at the Survival School. Everything one studies in any school, public or private, whether math or history or studyhall, is Knowledge which comes from Life and which relates back to Life. The good school is that one which shows the student this relationship; how to Self-discover this relationship. The good school helps the student discover how all Knowledge has this circular, spherical, cyclical unity with himself as center. Thus does the good school help the student re-discover that which all children have in childhood but which most adults have lost through mis-education: an automatic, neurological, genetically-driven sensitivity, spontaneity and enthusiasm toward Environment; and automatic curiosity, imagination and playfulness relating and harmonizing Self to Environment; an automatic Love of the Good Life."

Axe-Man Ratings

"All Mountain men must become Golden Axe-Men as soon as possible. All Mountain Men must become 100% skilled in the use of the axe tool if each wants to take care of himself and be free from adult baby-sitters. An Iron Axe-Man is unsure of the relationship between himself, his reasoning power, his skill and his tool. A Golden Axe-Man is sure of himself and his tool. There are no in-betweens. You either know how to use the axe properly 100% of the time, or you don't. If you don't, you have not earned the citizen-right to cut trees alone. You need to be watched and taught to protect yourself from yourself. Someone more skilled must always be with you when you use your axe.

In the mountains there are 4 Lethal Instruments:

1 - Axe

2 - Knife

3 - Fir

4 - Stoopid-Brain.

An Iron Axe-Man or Iron Knife-Man or Iron Fire-Man must be tutored by a superior teacher each time he wants to play with these instruments. This is crucial. The sooner you become a Golden Axe-Man, Golden Knife-Man, and Golden Fire-Man, the sooner you will become a Golden Reasoning Man — which is a full and simple Golden Mountain Man."

Syllabus Of Survival
T.D. Lingo, 1969, about 100 pp.
\$5.00, fully returnable if the contents do not please you.
from:
T.D. Lingo, Director
Adventure Trails Survival School
Laughing Coyote Mountain
Black Hawk, Colorado 80422

TEACHING THE UNIVERSE OF DISCOURSE

One of the reasons why there are so many bad communicators, let alone bad speakers and writers, is that English is taught as a separate subject in schools. Language is the common denominator in all our activities; it need not be taught as any infant can testify, but we can all learn how to use it.

James Moffet argues for a naturalistic language curriculum. The emphasis is on the active output of all areas of discoursespeech, writing, drama. (Thinking?) Teaching the Universe of Discourse and its companion teacher's handbook, A Student Centered Language Arts Curriculum, are for facilitating free play with the language. He would teach not by analyzing language, but by having students use it in every realistic way.

"At the risk of disparaging what a lot of English teachers, including myself, have relied on as curriculum guides, I have emphasized the ways we have unnecessarily deformed our sub-ject to make it into a content like other subjects. But English, mathematics, and foreign languages are not about anything in the same sense that history, biology, physics, and other pri-marily empirical subjects are about something. English, French, and mathematics are symbol systems, into which the phenomenal data of empirical subjects are cast and by means of which we think about them. Symbol systems are not primarily about themselves; they are about other subjects. When a student 'learns' one of these systems, he learns how to operate it. The main point is to think and talk about other things by means of this system."

"Nothing less than the growth of the whole human being requires a new integration of learning. What is common to all subjects should be the unifying force of schools, and what is subjects should be the unitying force of schools, and what is common is precisely the human capacity to symbolize first- and secondhand experience into an inner world to match against and deal with the outer world. The infant does this already. Such a capacity is not taught; it can only be exercised more or less beneficially. It operates integratively on all fronts at once, at all ages. Education as we know it hinders the growth of this capacity perhaps more than it fosters it. The learner expends most of his intelligence coping with the demands of arbitrary contents and arbitrary schedules instead of using his native apparatus to build his own knowledge structures from what he and others have abstracted. Since the latter is the baset of this life abstract the latter of the structures are structured in the second structure. ter is what he will spend the rest of his life doing, whatever the future, this primary activity, I submit, should gain priority over all else in education."

Teaching the Universe of Discourse

Relation of Physical Movement to Language

"Though movement to sound and pantomime do not seem at first glance to relate directly to the development of speech, they in fact lay an important base for it. For small children, speech is only one physical activity among others (as indeed it really is), and not a preferred one. As a specialized mode of communication and expression, speech only gradually singles itself out from movement and gesture until, in print, it becomes totally separate. For children generally — and boys especially — speech accompanies other action and justifies itself only when it can do what other actions cannot. Movement to sound and nantomime permit the child both to develop his sound and pantomime permit the child both to develop his powers of nonverbal modes of expression and to run up against their limitations. Too often schools attempt to make speech abruptly supplant these modes, forcing the child off native ground onto strange territory. The fact is that the two realms blend without a seam, and the nonverbal expression can provide the best pathway to speech development. The sheer so-cialization of school helps to promote speech — or can, if the activities permit socializing. The teacher can insure that speech grows out of physical play and bodily movement by extending nonverbal expression into the verbal. More concretely, the teacher orchestrates play with objects, movement to sound, and pantomime into full-blown improvisation, which in this curriculum will be a major method of learning to use language. "...2. But the stuff to be conceived and verbalized is primarily the raw stuff of life, not language matters themselves. Rendering experience into words is the real business of school, not linguistic analysis, or literary analysis, or rhetorical analysis, which are proper subjects only for college.

A Student-Centered Language Arts Curriculum

A Student-Centered Language Arts Curriculum, Grades K - 13: A Handbook for Teachers James Moffett, 503 pp., 1968 Teaching the Universe of Discourse James Moffett, 215 pp., 1968 \$2.95 *

Houghton Mifflin Company 777 California Avenue Palo Alto, California 94304

53 West 43rd Street New York, New York 10036



PRODUCTIVE THINKING PROGRAM

I've had brainstorms about problems that had been stumping me for days. In most cases the resolutions occurred after I had shifted my attention from the problem itself, to the way I had peen thinking about it.

Problem-solving involves skills that emphasize the processes of our mind - the ways in which we gather, sort, put together, and act on information.

The *Productive Thinking Program* is one of the few process curricula around and is obviously only a beginning. This supplementary course for elementary students uses comic strip detective stories, and presents questions about how to solve the mysteries. The questions are programmed to separate the specific and general ideas when organizing solutions; this allows the student to remove his blinders and explore a variety of angles and strategies.

The problems in the 16 booklets in the course aren't very soul searching and the text is pretty colloquial: you've got Jim and Lila Cannon of Elmtown, USA, trying to solve the mystery of missing rare coins, and, oh yes, there's Uncle John, high school teacher and amateur detective. The authors don't claim to de-velop new ways of thinking, just sensitize and strengthen processes rarely used, and the program supposedly has had re-markable results. Besides feeling a bit of nostalgia for the Hardy Boys, I found myself absorbed in the story line and the "figurin" out."



Productive Thinking

Program 1 - 9 sets, \$5.95 per set 10 - 60 sets, \$4.95 per set More than 60, special quotation of reduced price Educational Innovation Box 9248 Berkeley, California 94719

"I mustn't get stuck! I should try to see the problem in a new and different way . . . something is wrong with the aquanaut or with the capsule . . . but JUST SUPPOSE the opposite is true -that there wasn't any thing wrong with eith-

"Then why would he get out? OH! Here's another MAIN possibility. Maybe nothing was wrong at all. Maybe he got out because it was this in here." his job to

n-ACH

Most dialogues with our fantasies are between what we are and what we would like to be, and most of these dialogues end in a muddle with fears and expectations obscuring both the "here and now" and plans for long-term changes. The n-Ach course is designed to help students gather the cluster of thoughts and feelings surrounding their motivations to do what they want, to help them become conscious of the ways their actions either facilitate or hamper their own achievement.

The n-Ach program concentrates specifically on one type of human motivation - the need to achieve.

. The achievement motive consists of the cluster of thoughts associated with striving for some kind of excellence. The achievement motive differs in many ways from the thoughts associated with gaining prestige and influence (power motivation) or the thoughts associated with developing friendly relationships (affiliation motivation). Achievement motiva-tion is a pattern of thoughts in an individual which is focused on excellence, progress, doing things better, faster, more effi-ciently, doing something unique, or in general ways, compet-ing. The need for achievement — n-Ach — is characteristic of the energetic, entrepreneurial person, though increasing n-Ach will not inevitably lead a person to become an innovative businessman. A long-distance runner, a chef, a piano tuner, and an architect may all have equally high achievement motivation. Increased n-Ach may result in a wide variety of specific increased concerns for excellence."

The program provides students with experiences which help them to assess their own need to achieve and to develop pat-terns of thought and action which will enable them to achiev their goals most effectively. Throught five action oriented games students work in groups to learn about goal-setting, risk taking, and the use of feedback; each experience provides feedback on the effects of their actions and enables them to modify their behavior to achieve greater success.

We haven't seen the program in use in a classroom, so we can only evaluate it on the basis of the materials themselves. There may be some danger that the pressure of competition may not be what some kids need or can handle (though n-Ach can be expressed as competition against one's own past performance rather than competition against othe's own past performance rather than competition against others). The author's claim that the n-Ach program, <u>if properly used</u>, doesn't force a change in motivation; but rather it allows a person to gain greater control over the goals he sets for himself and the ways in which he pursues them.

. The Origami Game, based on the Japanese art of paper folding, offers a more elaborate opportunity for a range of achievement actions to happen. Its first phase is the production of 'space ships' under a 'government contract' from a pattern like the one shown below."

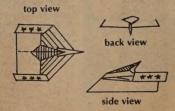
'You are the manager of a company that develops products for the space program. You are competing against rival com-panies to win government contracts for production of a space craft. The directions are below."

'The 'company managers' are given detailed printed specifications for construction of the space ship. A 'government contract agent' (the teacher or a pre-trained student) also demonstrates the actual construction of one space ship. The demonstration and a printed list emphasize quality control points ('Wing-tips must be turned up just enough to let the stars show. The pilot's cabin must be puffed out noticeably and not too narrow for the astronauts...')."





Finished space ship should look like this:



'The student 'company managers' are now asked to bid, on the basis of what they have seen and read, for a first contract with the government. The contract is to be based on the number of space ships they think they can make in six minutes. They are given information about typical assembly speeds,

n-Ach Program Alschuler, Tabor, McIntyre

Mini Set (1 each of all workbooks) \$ 7.50 \$ 25.00 Teacher Set Class Room Set \$112.50

Middletown, Connecticut

from: Education Ventures, Inc.

ZEN IN THE ART OF PHOTOGRAPHY

"By definition photography is painting with light.

It is the light working through us that is the photograph. And what is photographed. And who photographs."

"Photography is ourselves. It is our world we are creating."

"If we ride at 75 miles an hour, we are 75 miles an hour, and we see at 75 miles an hour.

We slow down. We take our heart's natural time.

When we can see, there in an infinity, whole galaxies, cosmos of pictures about us."

"What we focus on we become. How we focus we become. The message is the medium."

"Purification follows fasting. It is simply the exchanging of vision. Of seeing what has always been before our eyes. The obvious. The It."

In photography, as in many areas, it is easy to lose sight of the essential. We concentrate on more and better equipment, we study techniques, and we become alienated from our work because we have forgotten that it is part of us. Zen in the Art of Photography goes back to the essential question of why — not just why we take photographs but why do anything. It is a beautiful, poetic reminder that How is only important when there is a Why.

Zen in the Art of Photography Robert Leverant, 1969 \$2.00 * from: Images Press San Francisco, California



"We have allowed the picture and the picturetaker and the picturetaking to become one. Inseparable in a moment of time."

"The end point of the present trend is an invisible pocket camera which can take 5000 pictures a minute automatically and of perfect exposure. That is to say what photography is all about

Has been forgotten."

"A camera is an extension of ourselves. An appendage to bring us closer to the universe."

"A camera is only an intermediary between us and a new us. To repeat: we must be as receptive and ready as our equipment."

"There is no best picture.

Today's picture is different from what/where we were vesterday."

STUDIES IN COMPARATIVE RELIGION

Learning properly extends from principles. If first principles themselves are ignored, learning that lifts man through the hierarchical structure of the universe never comes. Man abnormally lives and dies space-time bound; dependent solely on reason (the ratio of all things) he would reduce the richness of the universe to his own petty dimensions. Blake has put it too well to be ignored: "if it were not for the Poetic or Prephetic character the Philosophic and Experimental would soon be at the ratio of all things, and stand still unable to do other than repeat the same dull round over again." And again: "He who sees the Infinite in all things sees God. He who sees the Ratio sees himself only." And again: "As none by travelling over known lands can find out the unknown, so from already acquired knowledge Man could not acquire more. Therefore an universal Poetic Genius exists."

Ah, "the same dull round over again" grips us and our land and our Western civilization and modern civilization whether East or West until we weep and tear at ourselves, and weary of ripping our own flesh we work on our fellow man's — individually and collectively.

"The tears swell from my stony fountains. wherefore do I weep Wherefore from my blind orbs art thou not sized with poisnous stings Laugh serpent youngest venomous reptile of the flesh . . . "

Again Blake. And thus it goes, and thus it goes . . . Not even the village cretin smacks his lips any longer in anticipation of what comes next in the modern world. Indeed, what does?

This brings us to first principles. At the risk of reducing the matter to too simple a position and thereby distorting it we put the idea in a formula —

facts: information :: principles : knowledge

(reason/ratio)

(Intellect/freedom).

Reflection should make it very clear that there is a vast difference between information and knowledge, and that what goes by the name of "knowledge" in the modern world is primarily nothing more than information, package it how you will. The reason the interminable studies by scientists and other groups end at Erewhon is because employing reason/ratio they gather facts to knit into another restricting garment of information: we frustrate, we pull and gasp, and then in agony we start another study until . . . But why say it? Inside and out we reflect this mentality throughout the modern world — "the same dull round over again."

Studies in Comparative Religion deals uniquely and in a way badly needed in the English-speak ing world with first principles leading to knowledge. It provides authoritative writing; it gives references; it leads one to sources. After studying this journal one is not the same (in the highe sense of the word), and if it is intended for him to breakout he begins the long/short-endless/immediate climb aided by an important instrument, an organon. One knows: "He must transcend these propositions, and then he will see the world aright."

Otherwise . . . But why say it?

Studies in Comparative

Subscription \$5.00 a year, or

\$1.25 for single issues

Religion

Pates Manor

Hatton Road Bedfont, Middlesex,

Editor

England

(Reviewed by Haven O'More)



MAIN CURRENTS IN MODERN THOUGHT

Student-centered learning...free inquiry...problem solving...open classroom — all good, all constructive, but then what next? The emptiness of our educational system must also be filled at a root level, a conceptual level.

Main Currents in Modern Thought is the journal of the Foundation for Integrated Education. Integrated education goes beyond interdisciplinary studies and general education to pull heterogeneous developments together into a meaningful whole.

Main Currents' writings, no matter what outward subject, are about the unity of man and of nature; science is treated as part of the humanities which in turn are treated as human expressions of universal realities. The Core Subject — What, How, and Why.

"We know that each discipline has its own area of study purposes, methodology; in other words, its uniqueness is formally recognized. At the same time, since a university comprises all of the disciplines which attempt to reflect the spectrum of man's multi-relationality to the cosmos, his fellow man, and himself, i.e., a spectrum embracing his view of reality, it would seem to follow that each of the disciplines, while unique and autonomous, ought to be logically compatible with the purposes and methodologies of every other discipline, so that all become capable of being subsumed within an inter- and even supra-disciplinary rubric, namely, the universitas. In any logical attempt at curriculum-building (at the elementary, secondary, and college levels alike), this would appear to be a basic requirement in order to permit the functioning of the aforementioned 'ordering processes in the human search for order and meaningfulness.' Thus physics and mathematics are independent disciplines, but they are also logically compatible. Similarly, physics and astronomy, chemistry and biology, and other combinations of the physical and biological sciences, display logical compatibility both vis-a-vis mathematics and among themselves.

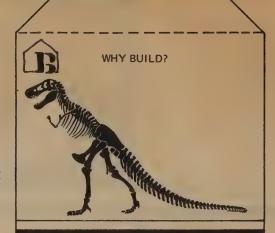
"But does logical compatibility exist between the physical and biological sciences on the one hand, and the social sciences and humanities on the other? It is here precisely that we encounter C.P. Snow's thesis of two dichotomous cultures in the contemporary intellectual environment. In fact, it may also be asked to what extent does conceptual and methodological compatibility exist between the disparate social disciplines (when one recalls, for example, the friction that has divided sociology with its emphasis upon societal regularities of organization and behavior, and history which has traditionally championed the unique and casual, as opposed to the causal and 'laws' of societal interpretation); Are there common conceptual denominators linking biology and religion, or is the traditional science-faith confrontation irreconcilable? To take yet another example at random, what is the significance of the symmetries (invariances) shared by molecular structures, land-use patterns in economic geography, architecture, and the fine arts? Andrews has drawn attention to mathematical regularities governing the structure and behavior of the periodic table and the musical scale, (9) but how much of this type of open-ended correlation is being attempted — or indeed can be attempted — in our formalized curriculum?"

Alastair M. Taylor, "Integrative Principles and the Educational Process"



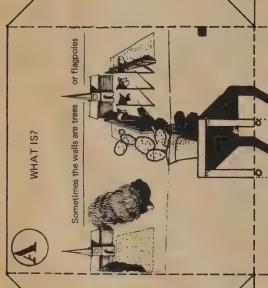
Main Currents in Modern Thought Subscription \$4.50 a year. from: Center for Integrative Education 12 Church Street New Rochelle, New York 10805

Educational Environments



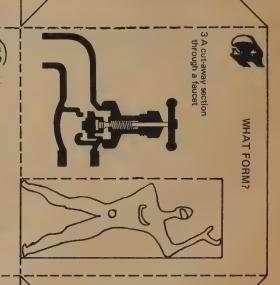
DIRECTIONS:

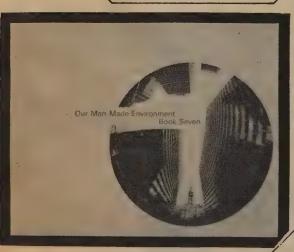
Cut along all exterior solid lines, and for door and window fold along all dotted lines. Glue all flaps to outside of finished cube.



OUR MAN MADE ENVIRONMENT BOOK SEVEN

Our Man Made Environment Book Seven is a "1001 ways rainy day fun book" that poses the questions on the walls of this cube and answers them through the medium of space itself, with tracings and pre-cut fold up models to be done by those inevitably engaged.

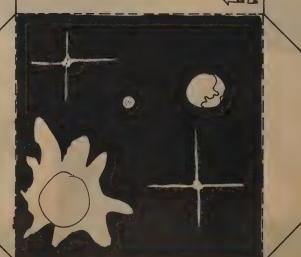




Our Man-Made Environment: Book 7 Group for Environmental Education, Inc., 80 pp., 1969 \$4.75 plus 75d shipping from: Joseph Fox Bookshop 1724 Sansom Street Philadelphia, Pa. 19103



HOM DO ME CHANGES



(Review created by Jon Friedman)

HARVARD EDUCATION REVIEW

Of all the literary deserts, architecture is perhaps the most barren. It's a delight to find something that makes sense and has something to say about the connection between children and the space we provide for them to learn and grow up in. This special edition of the *Harvard Education Review* provides little information for classroom teachers to help them improve the space they have, but many of the articles do provide insights into how schools got the way they are, and how they hinder learning and growth.

Most school environments sap creative energy and reduce everything to manageable apathetic easy-to-measure numbers. The problems are obvious; they will not be solved by a slightly altered architectural technology of "flexible partitions" (moving at the whim of a new superintendent) or "better design". The problem lies in the conception of the school as a static separate environment where children are taught to serve the convenience of whoever is running things.

The editing is superb; the pieces blend scholarship, utopian visions, poetry, nitty gritty comments on how kids and creative architects see today's schools and the larger environment.



This design, directed by Joan Fleischnick, an MIT Architecture student, is currently favored by the high school students. Cut away of the roof shows a large space with smaller spaces including a kitchen either within the space or directly adjacent to it. There are also enclosed rooms, nooks, and outdoor roof decks. Several indoor decks overlooking the large space are suspended from the roof trusses

Architecture and Education: Harvard Education Review

Harvard Educational Review Longfellow Hall, 13 Appian Way

BUILDING

Cambridge, Massachusetts 02138

ENVIROM

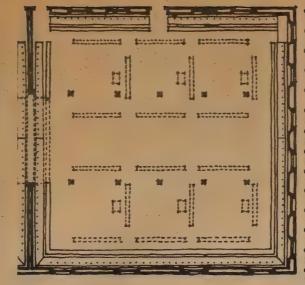
When people are together in a group, they are either too far away, too close, or sitting uncomfortably. Once twenty people settle in an Envirom, they don't have a choice. Envirom is a ring of lightweight, comfortable inflatable pillows. Be prepared to lean back and touch toes, in whatever group thing you are using it for. It can be used alone if you have 40 legs.

Made of heavy duty 20 gauge vinyl, the *Envirom* folds to blanket size and weighs 20 lbs.

designed by Sim Vander Ryn \$60.00

Environ 731 Virginia Street Berkeley, California 94710





TO LOUDENS ENCYCLOPEDIA

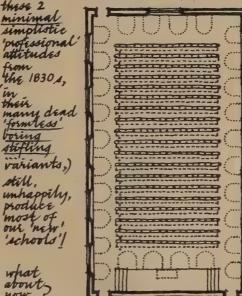
OF ARCHITECTURE

(LONDON. 1833) same scale plans from: above: the MADRAS system: (LONCON. 1833) sliding partitions and movable furniture subdivide 'enveloped' 'space' for up to 300 'scholars'.

below: the LANCASTRIAN system,

304 children are packed
in fixed rows.

a 'limited' building type 'solution'.



EDUCATION AUTOMATION

Buck Fuller plots a course for learning that allows instantaneous response to the demands for comprehensive information and free experimentation that characterizes the in-

"Education is going to be number one amongst the great world industries."

"Our whole educational process, all the way up from elementary school, is one of taking the child who has an innate comprehensive coordinate capability (not only to teach itself to walk but to be interested in the heavens) and give him differentiated parts – elements to work with. The prime patrons of the planetariums and the like are the children, because they are spontaneously interested in the uni-

"Get general comprehensive environment controls that are suitable to all purposes like a circus. A circus is a transformable environment. You get an enclosure against 'weather' that you can put up in a hurry within which you can put all kinds of apparatus — high trapezes, platforms, rings, nets, etc. You can knock it down in a few minutes."

'Work from the visible to the invisible very rapidly."

'Simultaneous curricula are obsolete. We must make all the information immediately available over the two-way TV's ready for the different individual human chromosomal ticker-tapes to call for it."

(Reviewed by Jon Friedman)

Education Automation Fuller, 88 pp., 1962 \$1.95

from: Southern Illinois University Press 600 West Grand

Carbondale, Illinois 62903

ARCHITECTURE, A BOOK OF PROJECTS FOR YOUNG ADULTS

Forrest Wilson is an amazing man. Old time radical, construction worker, artist, and editor of a slick professional magazine. He has an abiding interest in community and building and communicates to the audience he trusts most - children.

I tried to get my own kids to review this book, but they were embarrassed. All three of them, however, read the book all the way through, which is more than they usually do with books daddy recommends.

The creation of man-made space is a neglected part of formal learning. A Book Of Projects is a useful text for kids to begin to understand building and building forms. It illustrates major structure forms and gives experiments using simple materials to build the form in small scale. Bearing walls, arches, domes, beams, columns, trusses, and more complex structured forms are explained with clear illustrations and text.

(Reviewed by Sim Vander Ryn)

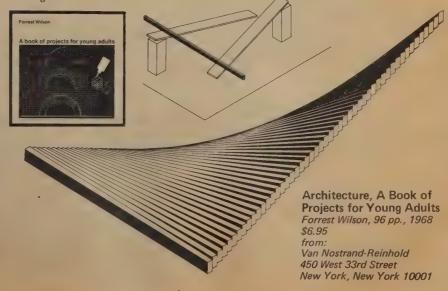
"PROJECT 26 — Build a curved shell with straight pieces of cardboard.

<u>Materials</u>: Eight or ten pieces of cheap thin cardboard eight and one-half inches wide by twelve or fourteen inches long. (The backs of pads of notebook paper are ideal.) White glue, waxed paper.

Tools: Cutting tool

Procedure: Cut the cardboard into strips one-quarter of an inch wide and eight and one-half inches long. Cut two cardboard right triangles as shown in the drawing. Glue flanges to one side so that they will stay upright while you are working. Cover the triangles with waxed paper and begin gluing the cardboard strips together as shown.

When the glue has dried, lift off the shell and load it with books to see what happens. It will spread apart where its points rest on the table. What should you do to prevent this from happening?"



OUTWARD BOUND

In a way, *Outward Bound* manifests everything we talk about in this Catalog. It takes place in the wilderness, which is both natural and harsh; it is sometimes dangerous, which means one must weigh the possibility of things with the risk involved; it is a facilitator of skills, which are necessary for survival. But more important, at the solo period at the end of the course, the participant must unavoidably confront himself, because there ain't nobody else there.

Outward Bound has schools in Oregon, North Carolina, Colorado, Minnesota, Massachusetts, and New Hampshire. Most programs are for young men and women between the ages of 16 and 24 and cost about \$400 for a month course. There are some adult programs and special programs for teachers. School districts with a certain percentage of school-age children from low income families may qualify for Title I financial assistance from the government.



tor information and application write.

Outward Bound, Inc.

Andover, Massachusetts 01810



"At some point in the second half of your course, when the intense pace and great physical exertion of patrol life has you keyed up, you will go on 'solo'. Solo is at least three days and nights of just you, your thoughts and your own empty canyon, mountainside or wilderness island.

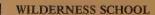
You may have a piece of plastic for a shelter, a knife or a few other basic items, but, at best, you will be given the minimum equipment necessary to existance in your particular environment. You will be taught either to live off what you can take from the land, or to fast for the duration of the solo. No one will bother you, no one will entertain you. It will be during this time that you probably will write most of your thoughts about OUTWARD BOUND.

Solo means something different to everyone — rest, loneliness, fear, boredom, peace, contemplation, new direction. It is an opportunity to take time out to look at yourself and at others, free from society's demands or diversions."

"You will, indeed, do many things that most people only read about. There will be expeditions on the open sea, through dense wilderness, across lakes and rivers, over the mountains. Take your pick. There will be climbing, thinking, running, talking, aching, walking, rowing, looking, laughing. It will be hard, but it can be done. You will be tired, but you will make it.

And at the end of the course, your mind and body will know each other well.

That's what it's all about."



There can be programs on the order of Outward Bound within the public school system. Jim Kerr and Kay Mathews of Scripps Center, a project at Portola Institute have organized a Wilderness School Program for schools on the mid-peninsula.

The Wilderness School is a program supported by Scripps Center designed to give groups of urban high school students the opportunity to experience learning in an environment different from institution green. Twenty students are taken into the wilderness for a period of three to five days, accompanied by four adults, who also happen to be teachers at the high school they attend. Each member of the group forgets his role as teacher or student, enabling learning of a different kind to occur. The classroom becomes the total environment of Big Sur, Point Reyes, or Mendocino National Forest, and the classroom materials are part of the natural setting. The activities that take place are those chosen by the participants, ranging from candle-making to marine biology.

The program is quite apart from something like Outward Bound, as it is neither a test of survival and physical endurance, nor is it meant only for those who are mentally keyed to outdoor life. The Wilderness School first of all exists to provide the opportunity for high school kids to see alternatives to what they experience in their daily school life. It gives these people a glimpse of teachers and other students as persons not playing their usual roles. Because any trip into the wilderness requires a bit of cooperation, it becomes an excellent time for the students to share a community feeling with everyone involved, an emotion rarely experienced in public schools.

Part of the total Wilderness program involves training school staff, who are willing to approach learning and teaching in new ways, to eventually make each school's program autonomous within that school. The program also provides a strong follow-up for students after they return from the trips, to maintain contact with the group, perpetuating the community which had developed during the camping, and allowing an outlet for those who find coming back to the institution difficult.

The Wilderness School is meant to be a catalyst for change in the public schools. It was originated three years ago by two teachers at Jefferson High School in Daly City. They are presently the directors of the program. In the spring of 1970, Wilderness trips occurred out of three different high schools in San Mateo County, with the help of the Scripps Center.

for information write: Scripps Off-Campus Center 540 Santa Cruz Avenue Menlo Park, California 94025





THE FREE LEARNER

Information is a vital resource, but even within a fairly small area it's frequently difficult to find out about the various attempts at alternative education. The Free Learner is an attempt by a group of people in the Bay Area to provide information on experimental schools, both public and private. Each school or project is described by someone who visited and observed it; their descriptions include both philosophy and facts on how the schools run.

A book of this nature is never complete and final. The schools in it are changing constantly; new ones spring up and some of the old ones die. There may be good schools which were not included, either because they were unknown to the group or there were not enough people to visit them. But if the book is not complete, it is still valuable for two reasons. (1) It is the only source we know of for detailed information on experimental schools in the Bay Area, and (2) it can provide a useful model for anyone interested in conducting a similar survey in their own area.

Free Learner
Constance Woulf
\$2.00
from:
Constance Woulf
4615 Canyon Road
El Sobrante, California 97452

EPOCH

Educators are just beginning to explore the potential or various media; and *EPOCH* is probably one of the leaders in the area. At their center in Berkeley they're developing a new kind of media center, a learning laboratory for teachers and students. The center is designed to make maximum use of space and resources; it includes a resource room full of slides, tapes, books, photographs and pictures, film strips and loops, and records; a mini-museum for light play with artifacts, pictures, musical instruments, and art materials; and a demonstration room for planetarium type slide-tape-lecture presentations. The demonstration room is circular, with projection





surfaces serving as walls; from a console the EPOCH teacher coordinates slides, music, and tapes to surround the viewer with a program of images and sounds.

EPOCH focuses on developing an appreciation for different cultures, especially those of the children they serve (EPOCH = Educational Programming of Cultural Heritage); its materials and programs are also designed to increase students' awareness of the interrelationships of art, music, dance, drama, literature, history, religion — all fields of knowledge.

For plans, instructions, and suggestions write: Epoch 1033 Heinz Avenue Berkeley, California 94710



For a long time the alternative/new/free-school movement in the U.S. consisted of isolated experiments in education. Most of the new schools which started were making the same mistakes their predecessors made, without knowing it. In the beginning, alternative schools had little credibility with the public through lack of communication and understanding. It was hard to find good teachers and it was hard for frustrated par-ents to find a good new school. The *New Schools Exchange* has risen to the near-impossible task of coordinating information exchange among the members of the new and free schools movement. Harvey, Tony, Cass and staff publish a weekly newsletter and an up-to-date directory of alternatives in education. The New Schools Exchange is growing hand in hand with the material they write about. I feel that they have added coordination and credibility to the alternative schools movement. They help to make the movement visible, without using a manner and style which would create negative public reaction to the growth of new-free-schools.

New Schools Exchange Subscription \$10 for 12 months or \$5 for 5 months New Schools Exchange 2840 Hidden Valley Lane Santa Barbara, California 93103

"GOOD THINGS

One regional followup the Conference on Alternatives in Education has been the formation of SPANNER, a group setting up a resource pool among people in public and independent schools in the Bay Area. They are storing information, making available unconventional education-related events, providing experimental and innovative talent where needed. Their first workshop will be at Pacific High School over the weekend of June 12-14. Write Three By Five...and Beyond, Box 2602, Stanford, Calif. 94305.

East Hill School in Ithaca is coming out with a book containing stories and art work by the children in their school, including stories such as "The Noodlesnock Monster," "The Jersey Devil," and "The Gas Station Book." The money — \$2.50 a copy — will help publish more books. East Hill is also looking to organize a week-long conference-festival in August on educational alternatives. Write East Hill School, 116 North Quarry St., Ithaca, N.Y. 14850.

The San Francisco Switchboard, one of the more active community information networks over the past two years, is evolving into a project called One, which will be housed in a huge ex-candy factory. The idea is to bring together disparate individuals and groups committed in one way or another to community involvement and alternatives life styles. They intend to hold a 'Free School' in the building, with all the tools gathered under One as its basic resource. Switchboard is at 1830 Fell St., San Francisco, Ca. 94117. "

THIS MAGAZINE IS ABOUT SCHOOLS

The voice of Toronto's Everdale-Superschool complex has published some of the finest writings about education I've seen. Their approach is free-wheeling and radical, and their concern is more with Education than with daily lesson plans. Articles cover topics rang ing from liberating up-tight schools from the inside to analyses of what schools do to people and what they can do for people. It is published in Toronto, so its emphasis is often on developments in that area; but it always

HOW TO SOFTEN YOUR HARD SCHOOL

- 1. USE THE CORRIDORS. Sell the steel lockers for scrap and use the money to buy cushions. Scatter the cushions around the corridors and let the students lie around on the floor. Have the floor cleaned very seldom but leave brooms about.
- TAKE ALL THE AV EQUIPMENT OUT OF THE STOREROOM AND PUT IT IN THE CORRIDORS. Let the students use it when they feel the need for it. Let them break projectors, tape-recorders and viewers. Let them take machines home, steal tapes.
- 3. HIRE A XEROX MACHINE AND PUT IT IN THE CORRIDOR. Place no restrictions whatever upon its use. Find a kid willing to keep it running. Put a thermofax copier in the corridor too. With a ıntain of paper and acetate.
- mountain of paper and acetate.

 4. OPEN UP THE LIBRARY. Take the doors off their hinges. Roll up the carpet and sell it. Let the students cut up the books with scissors. Provide scissors, paste, paper. With money provided by the sale of the carpet, buy:

 a. A bucket full of magazines.
 b. A bucket full of comics.
 c. A bucket full of newspapers.
 d. Several incomprehensible thick medical tomes.
 Try McAinsh, Toronto.
 e. A number of books in Chinese, Japanese,
 Sanskrit and other languages.
 f. A barrow-load of old books from the Old
 Favorites Bookstore, Toronto.
 g. Photographs, mape, geological maps, plans,
 blueprints, research papers.
 h. A bin of scrap film, clear leader, and old prints
 of movies.

 - A pile of large reproductions of great works of

A pile of large reproductions of grant art, new and old.

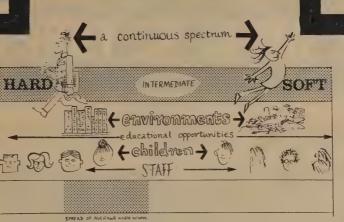
Masses of records of all kinds. Raid the second floor at the A & A Record Store, Toronto.

A stack of mail-order catalogues, models kits, calendars, and so on.

Circular stands full of cheap paperbacks by ournalists, hack novelists.

- Let the children destroy and re-fashion material. Be farsighted. Allow a child to learn by breaking, if you judge that the learning is worth more than the thing broken. Very often it is.

 ANNOUNCE THAT THE SCHOOL WILL BE OPEN ALL AROUND THE CLOCK ALL YEAR. Rip out any steel grills designed to slide across corridors. Unbar windows. Abandon all official paperwork, or give it to some student who would like to do it for you. Join in, start doing your own research in the library, on a pet topic, or build a model aeroplane. When the inspector calls, ask him to hold the fuselage while you glue on the wings. HAVE A BONFIRE of all personal files, LQ. scores, examination results, attendance records and the like.
- BUILD A ROUGH ANNEX ONTO THE SCHOOL with a corrugated iron roof, a wood stove, naked plumbing and bare, dangling light-



SPREAD OUT, MEN

If you are a teacher who knows how to spread, this implies that you are aware of the nature of the school in which you work and of the part which you play in keeping the fabric of the school taut. You know school taut. Tou know how far you and your class can go this year without tearing the fabric, you are planning to go that far, and nothing short of an earthquake is going to stop you. It's like riding a horse; confidence is a part of it. If you do not think of yourself as a built-in spreader, that is to say as a part of the very structure of the learning community, then you may find it hard to act on your own initiative. When an idea strikes you, you will talk it over with your colleagues in the staff room, or ask someone for permission to do it . . . in other words, you will mess about and create obstacles rather than go ahead and implement the idea on



This Magazine is about **Schools**

Subscription: 1 year for \$3.50, 3 years for \$9.50, 5 years for \$15.00 (4 issues a year) This Magazine is about Schools 56 Esplanade St. East Suite 301 Toronto 215, Ontario

includes enough of general interest to satisfy non-Canadians. It provides a means of getting in touch with the thoughts of some very fine people. Recently. *This Magazine* has taken on a more political tone which sometimes gets in the way, but the latest issue carries an article on "Keeping Our Politics Sensual" which indicates that they may be rediscovering their heart. Maybe the best comment on the magazine is that everyone I know who takes it cherishes their back copies and passes them around because they say so much so well.

HOW TO HARDEN YOUR SOFT SCHOOL

- 1. ESTABLISH A SYSTEM FOR SUPPLYING THE SCHOOL WITH MATERIALS. On several occasions I have walked into a free school and been bitterly disappointed by the lack of materials. No school dedicated to making a decent mess should open its doors before it has obtained two truck loads, say 5 tons, of begged, borrowed and stolen information in the shape of string, glue, magnets, records, magazines, books, paints, test-tubes, chemicals, transistors, advertisements for in each process transfer of the second stransistors. ments, felt pens, catalogues, newspapers, fossils, rocks, microscopes, herbs, wire, acetate, slide-rules, typewriters, tapes, film stock, stuffed owls, old pieces of machinery, cloth, thread, animals, bones, fishing flies, photographs, paintings, slides and films. Treat information like water from a tap.
- 2. PUT YOUR FINANCES UPON A SOUND FOOTING.
- 3. ORGANIZE A FEW BOOKS. Wade into the sea of information, clear a few shelves, and arrange thirty reference books in alphabetical order. Stick numbers on their spines, stamp them NOT TO BE REMOVED and chain them to the shelf. While you are in the mood, adlock a few doors and windo
- 4. MAKE A HARD ROOM. Set aside at least one room to represent the organized side of life. If you can afford it, build a laboratory with identical stools, gas taps, electrical outlets and small sinks for washing retorts. Have a ten-week course in the laboratory for which interested students have to sign in advance and attend at regular times. If you have no science teacher, immediately appoint a meticular shore is the statement of the statement
- STOP CHOOSING NEW STUDENTS to fit the community. The next person whom you choose should be unlike anyone else you've ever had before.
- 6. ESTABLISH A SCHOOL UNIFORM. Hair must reach the shoulders. All clothes must be so outrageously comfortable that they appear to be a uniform worn by abnormal children and their teachers. Mom pops a piece of TV chicken into her mouth and shudders. If there were no electric bells, detentions and examinations, our kids might look like that.
- 7. BUILD A BARN and write the Seven Commandments on the wall.
- 10. DIVIDE AND RULE. To really harden the school, create a lavatory for children only, a staff room for adults only, and a sewing room for girls only. Have tense discussions about Sex and the Generation Gap.

STOP THE PENDULUM

Perhaps the key is to appreciate that everyone has the right to stand somewhere on the continuum. From Dr. Strangelove to the mildest of Samoans, we need them all, as our wise men have told us, beginni with Lao Tzu 2,500 years ago . . .

Thus Something and Nothing produce each other; The difficult and the easy complement each other; The long and the short off-set each other;

THE THE TENESTE TH

Changing the classroom environment is work-in-progress information. We figured that the best way to talk about it was to let some people who are doing it say it. The next eight pages were compiled by Sim Vander Ryn, Jim Campe, and Guy

Chambers from Farallones Institute.

We hope to have more work in progress pages from people doing good things and have useful information to impart — workshops in print.



FARALLONES DESIGNS/INSTITUTE

WE DESIGN

SETTINGS FOR

LEARNING AND

LIVING

TRANSFORMING

SPACE THROUGH

INEXPENSIVE

MATERIALS

AND DO-IT-

YOURSELF

TECHNOLOGY



SELLING

MATERIALS,

EVENTS AND

TRAINING SO

YOU LEARN

TO CHANGE

YOUR ENVIRON-

MENT. WE

ARE STARTING

OUR OWN

DESIGN AND

LEARNING

COMMUNITY
WHERE WE

LIVE, LEARN

AND WORK

THE TRUCKIN' UNIVERSITY

We don't believe in schools as they are — no natural law suggests that 30 children cooped up 6 hours a day with one adult in a 30 foot square box is a good way or the only way to learn. A lot of evidence seems to suggest it's a damn poor way. The whole environment, the entire community is a place to learn, and many, many people are teachers.

Anyway, we do have public schools and they are changing. We help to change them by getting people involved in changing the public school environment themselves. One of the least verbal but most important teaching tools we have is the physical setting of school and the explicit and implicit rules affecting its use.

However, the actual physical changes are not as important as your involvement in the process of change. Indifference, apathy and vandalism are the inevitable consequences of policies that prohibit growing beings from working constructively to modify their own surroundings.

If a child does not see his image in his surroundings he is not going to learn, but will have to "be taught". Authoritarian education robs children and teachers of their own environment and replaces it with a standardized one, controlled mostly by school janitors. Although there are fears to overcome, this is where we have to start. We have found that by letting kids shape their own learning spaces, both inside and out, "they begin to take responsibility for their environment."

doit doit doit doit doit doit doit doit

we are compiling an and free materials and designing ways to reaycle them into classrooms and playgrounds



our catalogue is coming out in september, sena your two dollars wow.

we deliver the goods







farallones

731 VIRGINIA ST. BERKELEY, CALIF. 415 525-5425

tools to do-it-yourself. · we can come to

FIVE WAYS!

· we can sell you materials

components

plano

we can sell you

o we can sell you

· we can show you

have to use the moterials and

you or you can come to us for consultation and training

MATERIALS NEW & RECYCLED

Adhesives; tapes

Boxes; bags; barrels; billboards Cardboard; cable reels; carpet

Egg crates

Fasteners: foam rubber: fabric

Hollow core doors

Inflatables

Kinetic sculpture

Leather

Newsprint end rolls

Oldies

Poles; plastics; paper; paint Quick

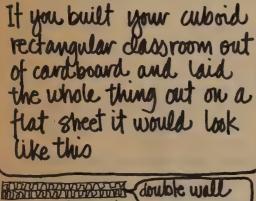
Railroad ties; rope and twine

Steel, silkscreening

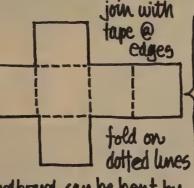
Urethane foam

Wood products, wire **Xylographs**

Zaftiq



any card-board can be used, but double and triple wall cardboard is best



cardboard can be bent by scoring it, but not cutting through, and then bending it also ha the cut

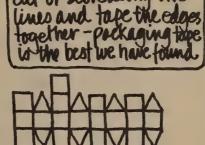
'soudo Kids can make them out of cardboard lay out the pathern on sneets of cardboard - cut or score along the

this form that shapes

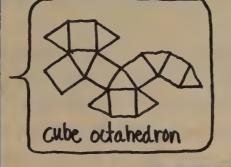
so much of our lives

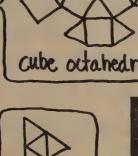
is only OHE of many

regular geometric

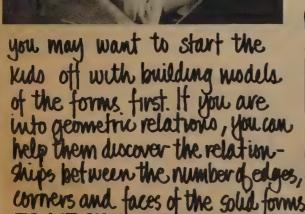


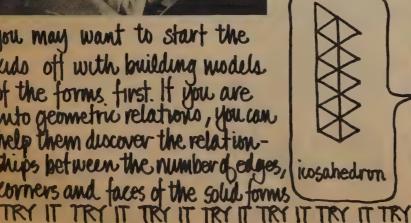
rhombi. cuboctahedron











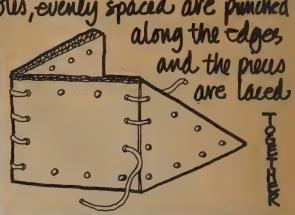


gether with rope

and then lacing

the pieces to -

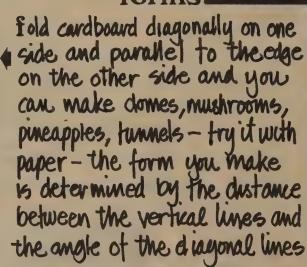
other regular forms all with equal side dimensions. an equal number of hous, evenly spaced are punched







Our bus arrives at an elementary school in the mornording. The teachers have previously participated in one of our workshops. A Farallones staff member has spent a week observing their classes. During a morning session with teachers and kids, several problems in the arrangement of the classroom are noted. Everyone wants small places for resting, reading, and study. The group decides they would like to build some cardboard structures for the space. The staff brings in the materials and tools and cardboard learning domes are built. The children videotape the process and when it is complete, take Polaroid pictures of the result. They write a story about the results. It all happens in one day.

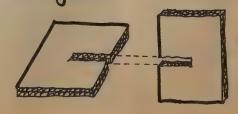


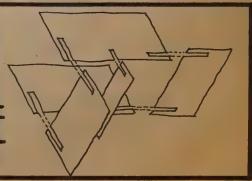


Disguised as a mild-mannered student from a great metropolitan university, Trashboy fights a never ending battle against classroom sterility and boredom with his crv . .

TRASH CAN

one of the cornect ways to join card board is by cutting nothers in the pieces and their slipping them together





PLACES

USUALLY WHEN WE'RE INVITED INTO A CLASSROOM THE FIRST THING WE DO IS ASK PEOPLE WHAT THEY NEED THAT THEY DON'T HAVE. RASH

I only had a rouge on Madine



"Nests" and "alcoves" are spatial scales that every classroom needs.

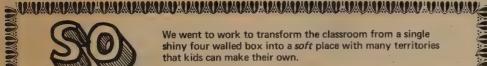




ME TOO verything is the same

kids want to be able to push on the room as well as having the room push on them

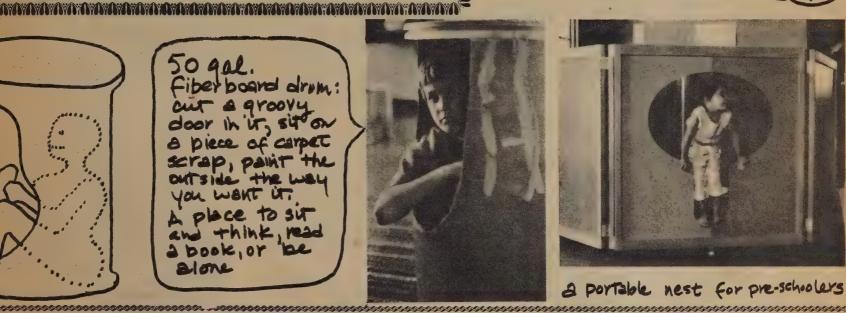
there's no place to be Slove



We went to work to transform the classroom from a single shiny four walled box into a soft place with many territories that kids can make their own.



0 9AL. iber board arum: & 9YOOY4 door in its sit on piece of carpet rap, paint the ion went place to sur book, or be





a portable nest for pre-schoolers



Most large rooms that people live in (houses, schools, etc.) need a soft quiet place where people can get to-gether. We built a womb-within-the-room in our large living room. What you need:



- a soft floor merging with the wall
- a soft low canopy
- columns define the corners
- an entrance change of level
- the right size for 6 to 12 people



Our womb (at left) cost a lot of money because it was fancy. The one in the classroom (at middle) is made of cardboard concrete forms, tie-dye canopy and walls done by the kids, a quilt of carpet scraps on the floor. The triangular unit (at right) form a fence at a day

TRAINING

Dear teachers, WE WORK WITH TEACHERS TOO. We've found that teachers who DO IT TOO (with the kids) make heavy discoveries — <u>about</u> environments (children's different reactions to rounded and softer environments instead of rectangular and hard; to being active rather than passive; to the differences between constructed rather than natural environments) — and about how different environments affect "subjects" (learning about Indians, arithmetic, arts and

Our approach gets into dreams and myths, feelings and fantasies. We know that <u>doing</u> something is the basis for learning, and that words <u>often</u> limit or bring down what was initially a rich and mostly nonverbal experience. But because words have been limiting does not mean they have to be — the bathwater should be thrown out, not the baby. So we're experimenting with taking the experiences of environmental changes and helping teachers find new ways of conceptualizing those experiences, of remembering them, of tracking and integrating them into the "deeper" realms of life through the use of metaphor, fantasy, and dreams. Words can slice apart feelings and that priceless sense of knowing. But they can also be poems and pictures that

link us with others' experiences, and with environments not yet created.

(For those wishing it or needing it, academic credit for such "in-service training" can be granted

through Sonoma State College near Santa Rosa, California.)
So even though a basis of the FARALLONES approach to environments and learning is that EXPERIENCE should precede (or be more dominant than) symbolizing and talking about it, and even though we know the teachers get a lot by simply getting into making environments, some of us are experimenting with a "teacher-training" component — to help teachers make deeper and more joyful use of the experiential events described on these pages.

Scene: You're a teacher and it's Time to do a Unit on *Indians*. You call in a FARALLONES team to work with you and the children on environments in which to do this. We would work with you to explore not only the more obvious <u>outside</u> aspects of the Indian's environment (tipis and forests and the like) but to help you develop methods to link the <u>processes</u> by which the Indians did it — their dreams and myths — to the very same processes that exist in all of us and so richly and freely in children.



A variable height, multi-level,

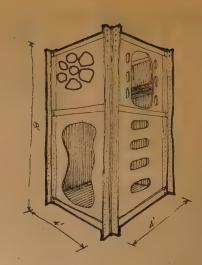
pace-making system with

merchangeable floors, walls,

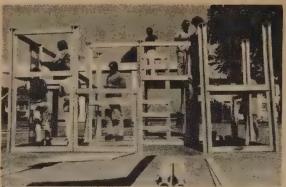
desks, tables, shelves,

and folding dividers.

The carrels actually create space every 2-level unit adds 16 square feet of floor area.







carrel shelves

bott-in desk
that can fit inside or outside of the corner



We wanted the kids to be able to construct the structure — but we found the cutting and drilling and tolerances required some skill and a wood shop. But the ERECTION turns out to be fantastic fun and is a sufficiently substantial job to give the kids a real sense of having actually done something big.

WHEN WE ERECTED the first prototypes in Longfellow School in Berkeley, the cardboard walls were quickly personalized via free-form cut-out doors and windows, painted flowers, signatures, and inspired some amazingly uninhibited painted comments on school, good and evil and . . .

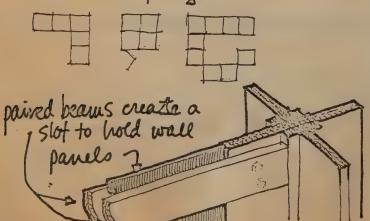
carrel

18

The plywood structure should be thought of as a beginning framework to be softened, decorated, added to, draped, transformed through use and over time into stages, houses, dens, ibited caves. The structure is not an end in itself, but a prop for myriad imaginative environments.

This is Dennis turned on his side. He has been working all year on an icosohedron playground toy made of old telephone poles. He's not finished yet.

The number of columns and walls needed is reduced as several units are crected jointly, as in these possible anaugurents









The classroom exists as a box with basic shape unchanged. Within that space a student needs

- small spaces for individual study - larger areas for arts and crafts
- a place for group discussion

Although most desks are not bolted to the floor anymore, they still can't be moved by the kids and can be used only as desks.



desks



The desks we designed give the kids a chance to create their own personal space. All exterior surfaces can be painted . . turned sideways the desk becomes a stool to be used at the

A portable desk supplemented by larger tables and carpet result in a flexible classroom interior.



TURNED OM KIDS

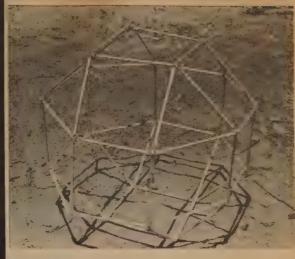


RIDE MINE LIKE A HORSE SECAUSE THAT'S WHAT TIS... AND I THINK I'M SOING TO PUT REINS ON

I LIKE MY DESK BECAUSE IT IS MY SIZE - ROSS

IKE THEM BETTER THAN
E OTHER DESKS BECAUSE
EY CAN MOVE AROUND
ASTER - NORMAN

Geodesics



Fred Untersher (Ant Farm) showed us a good cheap, flexible connector, made by cut-ting flexible polyvinyl tubing or garden hose into short lengths and connecting them with a machine screw. Simply select an inside tubing diameter that will accommodate standard diameter dowels. Once the frame has been constructed, cover it with chicken wire (or plastic, cloth, canvas) and paper mache. After it

dries, you can coat it with fiberglass resin to waterproof it. Remove the frame when it dries and use it again to make another for a friend.

TRASH CAN DO IT TRASH CAN DO IT TRASH CAN DO IT

Multi-Board



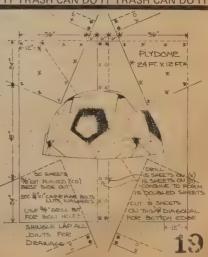
Endless roll of paper rolls anywhere on lockable casters. as drawing board, tackboard, chalk, paint, pencil, marker, backdrop for plays, murals, class and individual drawings, use both sides at once, poetry board, story board, bench, desk, movable storage chest, space divider, bus, truck, mobile library. Uses any type of paper any size roll up to 48" width or sheets up to 60" x 48".

TRASH CAN DO IT TRASH CAN DO IT TRASH CAN DO IT



Building a dome is a good way of getting people together. We built a plydome of the type Barry Smith has been building up in Canyon. It took us a weekend. The plydome requires thirty sheets of 3/8" plywood and five hundred nuts and bolts. Total cost for a 24' diameter dome: about \$150.

It's not difficult to understand why domes, a beautiful and efficient building form, are not used more. It takes a lot of peo-ple working together to do the job which goes very quickly, like an old fashioned barn raising. Building a typical subdivi-sion house takes specialized, compartmentalized skills than can be organized bureaucratically. But erecting a dome takes a tribal organization in which the whole group works to realize a single complete geometry. Every connection in the dome is sensitive to every other point. Everyone has to feel that as the dome comes together.



HALLS WALLS DOORS CEILINGS HALLS WALL

Is the hallway at your school a troublesome, noisy, wasted space? An escape tunnel from the classroom to the outside? Change them! Create uses for the halls, soften and personalize them. Take over the halls. At Lincoln School in Berkeley we found some neverused bright, warm color paint in the basement. The kids made designs and painted the doors to their rooms.

Change the ceiling height with paper, cloth, string. Change the wall texture with collages, old billboards, graffiti. Change the hall space by adding benches, cardboard forms, carpet scraps. You can create an alternate usable space between classroom and playground.

Walls are barriers that divide people and activities. But walls <u>can</u> belong to people and they can be used as a giant screen to display verbal and visual information.

A long time ago we discovered that it's cheaper to line walls and hallways with inex-pensive composition board that you can paint or pin to and discard every year, than it is to repaint with standard dull institutional paint every three years.

At Wellman Hall, University of California, Davis, we bolted a wooden rail into the curridor walls and inserted "" panels with photomurals, graphics, and collages of leather and fabric. Kids can keep changing panels and doing their own.

Some other things we tried at Davis that peo-

- semicircular panels with natural forms over the blackboards.
- * the spiral corridor in red, white and blue.
- * large room numbers.





















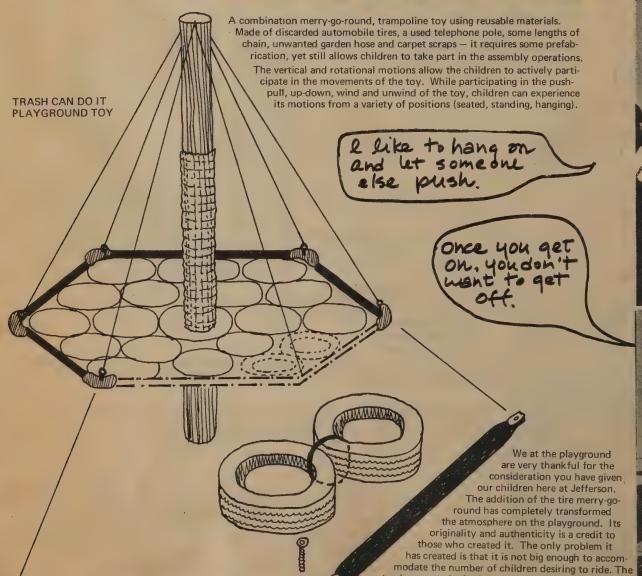












0





toy has created a fresh new enthusiasm amongst the Dayle Critchfield Tom Winmeil Playground Supervisors

children on the playground.

INFLATABLES are freaky...



at Wurster Hall, U.C. Berkeley

The ANT FARM taught us how to make simple inflatables using common polyethylene building plastic available at hardware stores or lumber yards. A 20 foot wide by 100 foot long roll costs about \$16, enough to make an air pillow large enough for a class.

You roll out the material and tape it shut into the desired pattern — a rectangle is good enough — using vinyl tape or super tape from Texas. An old upright fan or an attic fan should be large enough to fill a good sized inflatable.

Inflatables are simply large bags filled with air. They're cheap, easy, quick to build, and fun to be in. The principle is easy. A fan hooked up to a plastic tube inflates the building and is kept running as long as the building is in use. The entrance is simply a slit in the plastic.



at Farallones Freestone Festival

Merle Burnick is a third grade teacher at Jefferson School in Berkeley. In the Fall of 1969 we were still a graduate class in the College of Environmental Design, at U.C. Berkeley. Some of us worked with Merle during the school year. Here is her

The architects were students from Sim Vander Ryn's class at U.C. Berkeley. They were coming to our class, bringing us the possibility of changing the room, if we wanted to change it.

We sat on the floor, most of us under the age of nine — Shirley, Pat, David, Ross and the rest of us, and then it came. "School is like a prison." "Everybody sits in one place." "You can't go outside when you want to." "It's not like home." "There's a fence all around." "The room's dull." "There's nothing soft. Everything's hard, our desks, our chairs, the floor."

Five hours a day in a place that's like a prison? A place that's supposed to free the mind to think starts by confining the body.

The ideas on how we could change the room came fast. Shirley said we should paper the walls with flowered wallpaper. John said if that was done, he was moving out. Fiona said the kids could each take a part of the walls and decorate it the way they wanted to. Patrick said the room would be a mess and he didn't want a hippie pad. Karen wanted her own place. Carlos wanted a swimming pool, if not in the room at least in the school. They wanted a place to go besides their desks. The boys called the idea a fort. The girls called it a house. The kids drew pictures of a new room with colors and places to go.

The kids remembered the Tuesdays because those were the days when the architects came. They remembered Rick who brought a red wall on cannisters, with a roll of paper on the bottom that could climb the wall and make it an art board.

One Tuesday, the architects came with thick, heavy cardboard shaped in hexagons, squares and triangles — to make a room within our room. We got together all the paint we could find and painted the shapes. Then we taped them together. One was a huge geodesic dome. The other one was a smaller dome. The girls claimed the small one; the boys claimed the large one.

For the large dome, we needed several people to raise the sides and roof. It was a thing of beauty, a huge beehive with different surfaces and planes supporting each other. There were about eight of us holding the sides, while others taped them together. Then, before anyone realized what was happening, one boy crawled underneath the dome, then another and another and another and another, and then the sides began to heave and the roof began to cave and finally the powers pushing up on the outside gave in to the forces on the inside.

The need to build became the need to destroy. The boys were joyous in their abandon — cardboard ripping at the seams, bodies falling through the air smashing down the sides, while war noises came from behind the stockpile. A voice from underneath said, "This is just like Saturday." The process took two minutes, maybe. I was in a state of sad shock.

Then something absolutely amazing happened. There was quiet, then buzzing around around the ruins. Then as quickly and contagiously as the destructive process began, the boys began to build — in their own image — a two-room suite. Replacing the geodesic dome was an A-shaped structure attached to a square room. It was constructed entirely from the ruins. It was the boys' fort — a place to go, away from the desks, another world without leaving the room. The boys's fort lovingly lasted a month and then collapsed, not from destruction but from use. The girls' house outlasted the boys' by a few weeks.

By now we were ready for something more permanent, a place to go that wouldn't fall down in a month. We decided what we would need to build a quiet corner in the room. For days the kids brought in empty egg and milk cartons, tin cans and newspapers. Kris and Jenny from Sim's class came to tie and dye cloth with the kids. Bill came with pieces of rug. About two weeks later we began to build.

The quiet corner started with box benches, padded with an unusual assortment of rug patterns sewn together, extending over the benches and covering the floor. The area, about six feet square, now looked like an empty wading pool. At each corner there was a huge tube that stood six feet high and about one foot in diameter. A wood frame was nailed to the top of these poles so that panels could be hung from

The kids rolled newspapers and tied them together, forming panels that looked like xylophones. Others strung egg cartons, using yarn to attach them or taped milk cartons together to make milk carton towers. Then the kids hung these panels along with the tie and dye cloths, and the quiet corner had sides. A large batik cloth was stretched to make the roof.

On the day the quiet corner came, the barrels also came — big barrels, big enough to hold a good-sized gorilla. Arched openings were cut in each barrel so that the kids could crawl in for the ultimate privacy. People have come in the room and commented on how small the class is, until I point to the barrels.

The quiet corner and study barrels freed the kids from their desks. They moved around the room discovering and claiming other spaces in the room. Norman had his own study space. It was between the sink and the bookshelf — just big enough for his book and his body. Willie and Jon went under the tables. With the extra tie and dye cloths, the kids hung dividers under the table.

A few people discovered the hall as a place to study rather than a place to go when you didn't behave in the class. Others came down from their desks to a rug sample on the floor beside them. Then came the time to build forts and clubs, improvisations with corrugated paper or cardboard, involving two or three desks and the area found between them. These forts and clubs moved like molecules — gathering another member or letting one go. Their shape and movement was governed by the ϵver -changing social order of the class.

As the room began to dance, I had the sensation I was addressing a merry-go-round. I didn't know who was up and who was down. When I looked to the west for someone, I found him in the east. I heard myself ask, "Where's Karen? Where's Willie? Where's Fiona?" The kids would answer, "She's under the table. He's in the barrel. She's in the quiet corner." As for David, he escaped me completely because he found places I never knew existed in the room. Would you think of looking for a boy among the coats in the coatrack?

If this story sounds anything like Alice in Wonderland, it was that kind of trip. What I learned from all of this — was that I was going to be teaching in a different style. By freeing the space in the room and encouraging movement, we had taken the first step in removing the prison atmosphere.

Who owned the space in the first place? I didn't realize it, but I did. I was the owner of the space, the governor of the air, who determined who would breathe in what place, where the children could keep their bodies, and consequently limiting what they could express by determining when and to whom they could say it. Freeing the space in the room released new energy in the room. It was harder to get the kids together to respond to the same thing at the same time. When I owned the space, things were much easier.

This situation called for the Super-Striped Charger - a nine by twelve rug that everyone could sit on. All group lessons are held on the rug. We usually meet there three or four times a day to explain a concept or assignment, to share experiences, to discuss things or watch a play.

The natural grouping of the kids leads to natural teaching situations. I gave up my space and with it I gave up my right to be the only teacher in the room. If someone knows how to borrow with two place numbers, does a teacher have to tell him how to borrow with three-place numbers, or can he be his own teacher and discover through the underused teaching aid called thinking, how to do it himself. I have seen a smile like no other smile, when a self-teacher asks me, "Is this right?" and I say, "Yes it is."

The kids teach each other, often better than I can. For instance, a girl had trouble with multiplication. I asked if there was anyone in the class who thought he could teach her. Several hands went up. One by one they went up to the board to show her how to multiply. One by one she rejected them because she couldn't understand. They could do it, but they couldn't teach it. Then she called on Ross. In clear terms, he explained it. She understood and Ross took her outside the room and worked with her until lunchtime.

Then there are things in the room that are teachers: dictionaries, encyclopedias, books of all varieties, counting beans and marbles, chalkboards.

Most important there are people, the kids themselves, me and anyone else who walks into the room. If you're coming, you're it.

Another aspect of calming the merry-go-round, but also keeping it running — is me. Yes, part of the space in the room is mine. I have the freedom to express myself too — to set priorities and affect the tone of the room. I am learning from my teachers in the room and from the living we do every day.

Perhaps the most creative act we did came during the last part of the school year. We succeeded against all odds in getting the present desks, the heavy, awkward pieces of furniture with chairs soldered to the front, out of the room

The way it happened was that Kris from Sim's class designed a small desk resembling a mail box. She brought it into the room about the time we built the quiet corner. Of course, only one person could have the desk — and that choice was hard enough. But it spurred on some of the other kids to devising their own types of desks. For instance, Karen brought her small rocker from home and placed it in front of a box where she stored her things and wrote on the top surface. John put a rug on the floor in front of an orange crate and made this into his desk. Dana chose the piano bench for hers, since we had no piano to go with it. These improvisations began to spring up all over the room.

When Kris walked in one day and said she was ready to make her mailbox desks on a large scale, we were ready to help. The desks were constructed out of tubing used for concrete molds and plywood. The concrete molds were donated, but we needed about \$50 for the plywood. We had a bake sale and made \$38.00. We scrounged up the rest.

"When are the desks coming? When can we paint them? When are they coming?" Everyday for two weeks we thought about the desks. The plywood sides came first. The kids sanded the sides and the carrying holes so they wouldn't get splinters. Then we sent the sides back so they could be glued to the tubing. When Jenny and Kris brought them back a few days later, we carried them from the back of a pick-up truck to the room, where each person chose one that was his size.

The kids painted the tubing with tempera. Jon had "GIZMO" painted on the front. Alan wrote "DUNE BUGGY" on his, and Robert wrote "RIGHT ON" on his. Karen made hers into a horse. On mine, I made a collage. Later that week we took the desks outside and enameled the plywood in bright colors.

If you can picture a mailbox that stands about one and a half feet high, with a roll top and a board that pulls out for a writing surface, that's what the desks look like. The kids sit on the floor, usually on a pillow or a rug sample.

In the process of making new desks, we learned such things as what "portable" meant, what a jig saw was, how sandpaper can change the texture of a surface, the impermanence of tempera and the permanence of enamel, the business of raising money, making publicity, selling cakes and counting money. We became more conscious of how the room looked, that the new desks had a unique form — one that was pleasing to the eye as well as being a useful tool.

What's coming next? I don't know. But it has been a full year, one of living, stretching, growing, loving and learning.

TRASH CAN DO IT

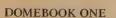
NEW SCHOOLS MANUAL

A lot of people would like to start a school, but without a strong logistic and financial backbone, chances are the school will fold. No matter how soft one's school is to be — starting is a hard process. New Directions Community School seems to be a place that's making it. This is their booklet:

"This booklet is by no means complete. It contains what one group of students and older folk found out when they set out to start a secondary school. We're still working on that school, and don't want to get into the book business, but it seemed reasonable to accumulate the information we had and make it available to others involved in the same effort - wish someone had done it for us.







Domebook One is a complete course in domes: the best one existing. It contains well-expressed thoughts and concepts concerning making and living in domes, and the nature of the structures themselves. But most of the book is solid informa-tion accompanied by figures, drawings and photographs. It begins with dome geometry and explores many types of domes created in different parts of the country, including commercially produced ones. The information covers floors, membranes, struts, joints, sealing joints, ventilation, costs, building codes, math and more.

With a book like this, building domes for schools finally seems feasible and possible. You don't need professional carpenters, plumbers, roofers, etc. You take your design from already existing patterns, or conceive your own; build a model; then go to work, with this book for a guide. I can think of no more wholesome, beautiful or satisfying an environment for a school than a dome; and I see great educational value in actually build-ing the environment one will work and live and learn in. (The layout and design of the book is also beautifully done, clean

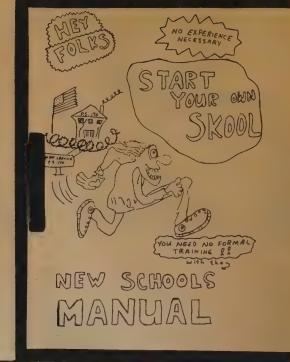
The booklet is not complete and could use a little more beefing up on the details. It is, however, the most detailed pamphlet on the subject around at this time. Their experience of starting a school points out many structural and ethical questions which I might not have considered had I not read the

"The main document dealing with California's educational law is a circular Max Rafferty or his replacement sends out yearly summarizing laws for private schools. There are too many and their main function with regard to us will be harrassment. Many of them are theoretical requirements that schools have gone for years without dreaming of meeting. But they also provide the legal framework for repression if it comes. It is a very good idea to know these laws, and if you ignore them, ignore them in knowledge. Or he ignore them. ignore them in knowledge. Or be innovative.

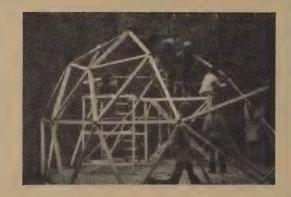
Many high schools have successfully held classes in homes and garages and avoided school building codes — which don't apply to offices, and often not to tutorials. Schools with one classroom are exempt from other laws. Curriculum requirements are almost non-existent in California now, except those set by the desires of universities."

'If you have more than one classroom in a building, or more than 50 students in one building, you're supposed to have a fire alarm system.

'Schools are generally not eligible for accreditation until 've operated two years. If after that time, you feel it's important, have the money to pay the agency, and want to try — write Western Association of Schools & Colleges, 1499 Bayshore Highway, Suite 234, Burlingame, CA.



Start Your Own Skool from. **New Directions Community** 445 Tenth Street Richmond, California 94801



"A sphere is used as the shape for structures because it encloses the most volume with the least surface area, and doesn't rely on internal structure. The tetrahedron, the simplest polyhedron, encloses the least volume with the most surface area. The sphere is the strongest shape against internal and radial pressure; the tetrahedron against external and tangential pressure. The grid is developed from a basic grid of spherical polyhedra (a polyhedron projected onto a sphere). Regular polyhedra are the best shapes to generate a grid from because they have the most symmetry and regularity."

"New life contained within new geometrical shapes and patterns.

Shelters designed and built with beauty, efficiency and grace. A skin instead of a roof overhead, a light membrane protecting you from the rain. Symbols of quick escape from the cities. Economical and orderly use of materials. Minimum violation of land. A structural system so simple that anyone willing to exercise a reasonable amount of care and 'quality control' can build his own shelter."

"These are domes that we designed, built, and live in; we are thereby testing the 'physical projection' of our fantasies

"These are domes built by individuals in the 70's that could well be prototypes for future industrial production of low-cost housing.



The people who made Domebook are thinking about getting a bus, putting a dis-assembled dome on top, and going to schools with slide shows and movies. Write and find out.

> Domebook One \$3.00, 56 pp. Pacific Domes Box 1692 Los Gatos, California 95030

"Ten domes were built in four months at an experimental high school in the California hills. Three of the domes were built almost entirely by 15-17 year olds.

The book was written and assembled shortly thereafter—in haste—as we are eager to communicate our experiences and discoveries.

The cycle so far has been something like this: need/design/build/inhabit/communicate/

Strut shape If you build the dome according to plans, with regular rectangular wood strips:

you will have a gap when you put it

(See opposite page: "Ripping")



If you want struts to fit together tightly, ~

rip to a 7^0 bevel on a table saw. Purchase wood twice the depth of the strut size desired. If you want struts $3/4^{\prime\prime}\times1^{\prime\prime},$ get











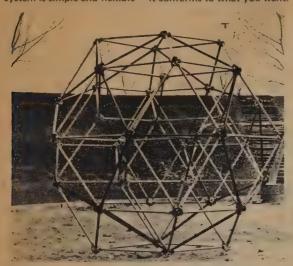
Important: When you later cut the end angles on these, remember that with A's and C's there will be a right and left side to each triangle. Look at the plans and drawings of right and left triangles to see this clearly. With B's, where both tip angles are the same, it doesn't matter." same, it doesn't matter.



ZOMEWORKS

Zomeworks builds climbers and playground structures; at least, they build the components — a group of kids with wrenches and a brief introduction to the system can build any of the

When the Zomeworks (customized-ex-school-) bus was in California this spring, they visited many types of schools, public and private. The bus rolled in . . . the kids jumped on and first built models of the structure they wanted with the zome toys. Then they erected the structures (strange to most of them) in about an hour. The kids did some much-needed work with their hands and built something strong, fun, and beautiful. The structures, once completed, are not permanent; they can be disassembled and built into other forms. The Zomeworks be disassembled and built into other forms. The Zomeworks system is simple and flexible - it conforms to what you want.



THE BUS

"Zomeworks has outfitted a bus for a sales vehicle; a rack on top to carry components; the inside outfitted for the crew. 3 or 4 people will take Zomeworks on the road to show tell, and sell city mayors, college professors, kids, hitchikers, businessmen, etc. Zomeworks' products. This giant mobile illusion designed and painted by Clark Swenson has been entirely built at the Zomeworks shop. As the bus travels around to various des-tinations everybody is invited to help erect Zome Climbers, come aboard and build models, and so on."



"DOME INGREDIENTS

Frame & Skin

- 30 pieces 3/8" "Duraply" plywood 4'x 8' sheets
 about 1700 lineal feet strut material (after ripping to bevel)
 3 rolls 48"x 50' vinyl. The 48" just makes it as covering for small
- 30 lbs hot dipped galvanized 4d or 6d nails

- 20 tubes waterproof construction adhesive
 1 box 5000 Monel (rustproof) 1/4" Duo Fast staples
 enough caulk and/or tape for about 800 lineal feet joints
 500 1/4" diameter galvanized bolts. Length of bolt depends upon total width of bolted-together struts. I used 3 1/2" bolts for 3" struts"

"We planned the layout of our dome in correlation with its intended use. Our bed is up about 5 1/2', with storage underneath and the stove and kitchen are up against the sides. The floor is left open — a large open area for work, play and yoga classes. Our classes are incredible. Domes are such a centering trip. One's eyes can easily center on any of the mandalas formed by the struts.

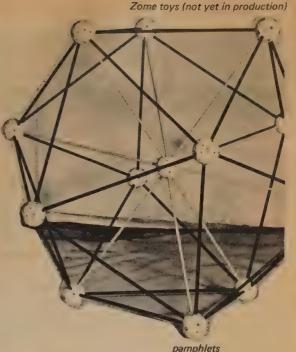
"Even our conversations are more centered because we sit in a circle and stay in closer touch with each other. All vibrations — sound, light, heat and all our awareness — begin in the center and radiate outward and rebound back and forth from the center. Consequently, chanting is mindexpanding and all-encompassing.

"Living in a spherical single unit home makes us wholer people. We feel more whole and have our whole trip around us. We stay more in touch with each other and our friends and also this wholeness has a healthy effect on our possessions, our wants and desires. Feeling whole and centered is crucially important, and domes surely can contribute to this."



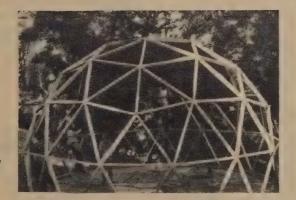
"The structures built with this system resemble crystals, but nature builds no crystals like these. Within this system there are different structural personalities, and they can work together when guided by an outside intelligence. If they are left to grow by themselves they come into hopeless conflict. These are in a sense new bio-crystals and their growth follows the symmetries of a shape that Plato decided was so exquisite it must be reserved for the shape of the whole universe."

"We have the children help in the construction. Structure and order need not be boring or repetitive. The controversy — should things be ordered or free form? The battle seems senseless once you contemplate structures such



prices new info & arrangements Zomeworks Corporation 1780 Menaul N.E. P.O. Box 712 Albuquerque, New Mexico 87103





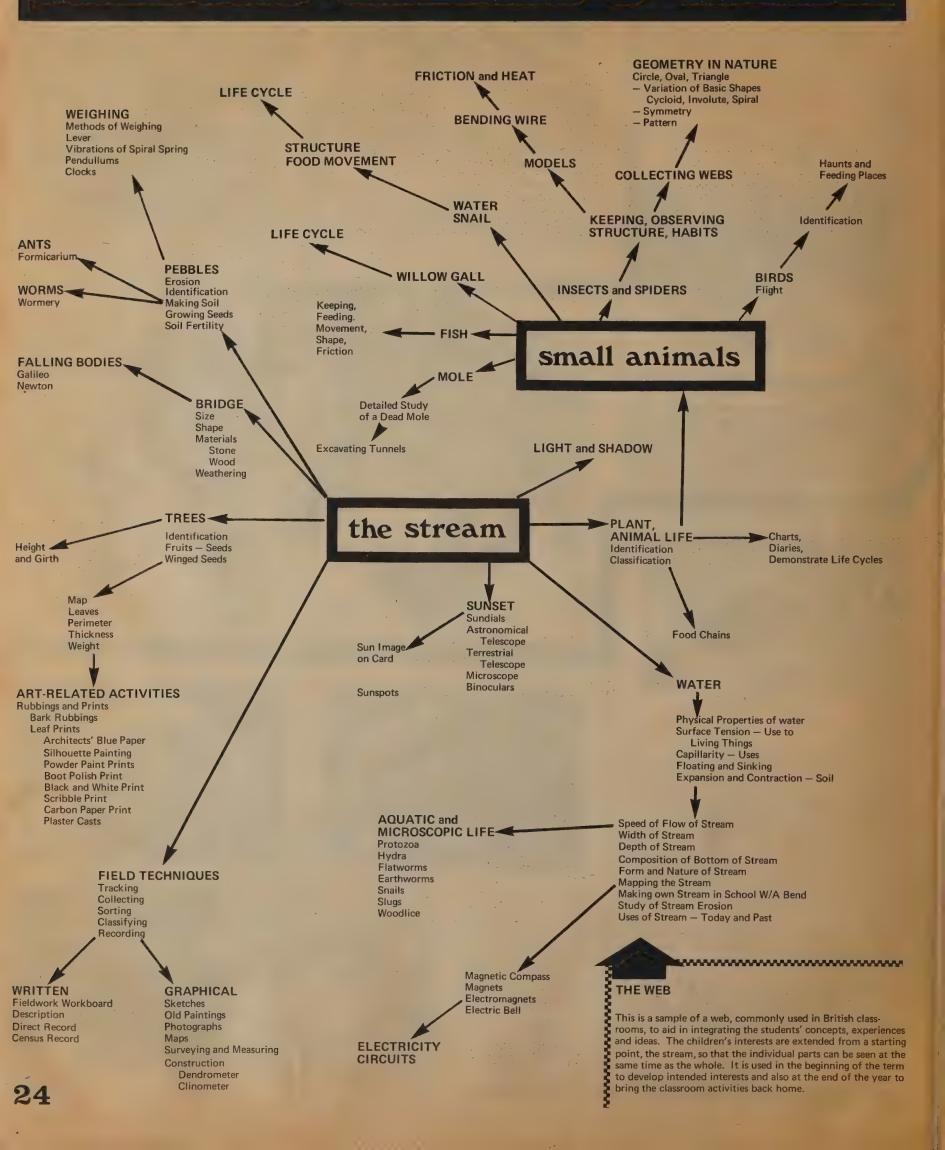




Atmospheric motion when little local "sun" i.e. heating and lighting elements are near top *inside* of system, i.e. on *concave* side of system which concentrates energy inwardly.



Classroom Materials & Methods



CHILDREN AND THEIR PRIMARY SCHOOLS

This report (named after its chairman and commonly known as the Plowden) is the result of a 3-year study of primary education as now practiced in England. The charge given in August 1968 to this group, the Central Advisory Council for Education, by the Minister of Education, Sir Edward Bayle, was "to consider primary education in all its aspects and the transition to secondary education." This occurred and recommendations were made.

Volume one gives the necessary understandings for the person serious about the English school movement and its importance for American classroom. The Plowden comes out of a philosophy and concern for the ways in which children learn and will give to the American teacher a sense of the quality of British Education. Volume two deals with research and surveys used to support recommendations of the council.

In addition it supplies an excellent source for bedside random reading.

"A school is not merely a teaching shop, it must transmit values and attitudes. It is a community in which children learn to live first and foremost as children and not as future adults. In family life children learn to live with people of all ages. The school sets out deliberately to devise the right environment for children, to allow them to be themselves and to develop in the way and at the pace appropriate to them. It tries to equalise opportunities and to compensate for handicaps. It lays special stress on individual discovery, on first hand experience and on opportunities for creative work. It insists that knowledge does not fall into neatly separate com partments and that work and play are not opposite but complementary. A child brought up in such an atmosphere at all stages of his education has some hope of becoming a balanced and mature adult and of being able to live in, to contribute to, and to look critically at the society of which he forms a part. Not all primary schools correspond to this picture, but it does represent a general and quickening trend.

"Some people, while conceding that children are happier under the modern regime and perhaps more versatile, question whether they are being fitted to grapple with the world which they will enter when they leave school. This view is worth examining because it is quite widely held, but we think it rests on a misconception. It isolates the long term objective, that of living in and serving society, and regards education as being at all stages recognisably and specifically a preparation for this. It fails to understand that the best preparation for being a happy and useful man or woman is to live fully as a child. Finally, it assumes, quite wrongly, that the older virtues, as they are usually called, of neatness, accuracy, care and perseverance, and the sheer knowledge which is an essential of being educated, will decline. These are genuine virtues and an education which does not foster them is faulty.

A NOTE FROM THE LAYOUT MAN:

I would have broken up the type with photos, but these British books contain rather dull photos of rather bored-looking kids. For

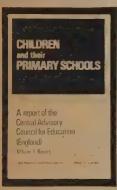


Plate 46.

The Beginning of Life-long Interests

"Society is right to expect that importance will be attached to these virtues in all schools. Children need them and need knowledge, if they are to gain satisfaction from their education. What we repudiate is the view that they were automatically fostered by the old kind of elementary education. Patently they were not, for enormous numbers of the products of that education do not possess them. Still more we repudiate the fear that the modern primary approach leads to their neglect. On the contrary it can, and, when properly understood, does lay a much firmer foundation for their development and it is more in the interests of the children. But those inter ests are complex. Children need to be themselves, to live with other children and with grown ups, to learn from their environment, to enjoy the present, to get ready for the future, to create and to love, to learn to face adversity, to behave responsibly, in a word, to be human beings. Decisions about the influences and situations that ought to be contrived to these ends must be left to individual schools, teachers and parents. What must be ensured is that the decisions taken in schools spring from the best available knowledge and are not simply dictated by habit or

Children and their Primary Schools



INFORMAL EDUCATION

Beware for it is only a toe in the water.

The Center Forum

Vol. 3, No. 7, July 1969 Free

With luck the serious teacher may be able to obtain this issue

of *The Center Forum.* It contains the very best selected bibliography on the English school movement I have seen. In addition, the two short articles help give a little "instant definition"

to those eager to understand what is happening in England and

Children and Their Primary Schools Plowden et al, 1967

Volume I - \$5.00 Volume II - \$6.50 from: Sales Section **British Information Services** 845 Third Avenue New York, New York 10022

Center for Urban Education

105 Madison Avenue

New York, New York

JUNIORS - A POSTSCRIPT TO PLOWDEN

A quick definition of terms:

Primary Schools - children ages 5 to 11 Infant Schools - children ages 5 to 7 Junior Schools - children ages 7 to 11

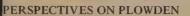
This book describes, considers some of the recent developments in junior education: the needs of children in this age group plus the pressures under which their teachers work

"One of the dangers in education — and perhaps in other walks of life — is that the skill of the successful practitioner will be imitated. Often what he is doing looks so easy and so effortless it seems that almost any fool could achieve it. Imitation is to be encouraged provided that what is copied is the skill, thought and sheer hard work that has led to the initial success. There is no short cut to any important craft, and one of the present-day tendencies is to seek after short cuts. I have often een conscious of the fact that when my class most obviously ppeared to be doing what they liked in complete freedom, then whatever skill I possessed as a teacher was being taxed to the utmost limit. I had to be aware of what was happening in so many different quarters and with such different people, to know when to step in with advice, when to stand back and when to help gently draw to a conclusion something that was good, but which had become profitless because the vitality had gone out of it — the children not having the wisdom or experience to appreciate the fact or to cope in such a situation. The more popular a 'movement' in education becomes, the greater the dangers of its degeneration and eventual disfavour.

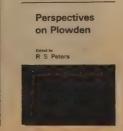


Juniors, A Postscript to Plowden Arthur Razell, 144 pp., 1968 \$0.50

Penguin Books Ltd. Harmondsworth Middlesex, England



The papers in this small volume are critical of the educational thinking of the Plowden Report. Most of the criticism is aimed not so much at the concrete recommendations, but at the thebry behind them. The articles are short and incomplete, but necessary for the realization that Plowden is not the panacea of our educational ills.

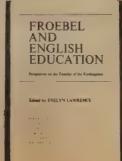


Perspectives on Plowden Peters, 106 pp., 1969 \$1.25 from: **Humanities Press** 303 Park Avenue South New York, New York 10013



FROEBEL AND ENGLISH EDUCATION

Friedrich Froebel, the originator of the kindergarten (Blankenburg, Germany, 1837), was the first educator to realize the importance of group life for children of pre-school age. Until then, the child's early years and training had been the sole prov-ince of the home. By close observation, Froebel was able to build up a system based on the needs of very young children, and allowing for their mental and spiritual growth. He devel-oped methods and materials—called 'gifts' and 'occupations' to train the children in dexterity of movement and to teach them something of the laws of nature while they played. ..."



Froebel and English Education Lawrence (ed.), 248 pp., 1969 *

from: Schocker Books Inc. 67 Park Avenue New York, New York 10016



The drawings are from The Center Forum.

WHERE

Where prints factual, up-to-date reports on all aspects of education, but more important, the articles present new work in education in a simple, easy to follow manner. This small tabloid, filled with pictures, illustrations, and diagrams, has wide range and usefulness, even though it's mostly concerned with British schools and systems. Where is published six times a year with occasional supplements devoted to specific topics

"If you walked into a lesson at a secondary school, a math lesson say, what would you expect to see? Try to visualise the classroom: the people in it, the furniture.

eople in it, the furniture.

"The common image is probably that of a teacher at the front of the class, with a large blackboard and a desk nearby, children in rows facing him, windows on one side, notice-boards on the walls. This physical environment has an astonishing pervasiveness in schools: and so has the method of teaching it presupposes — class teaching. Indeed class teaching is so universal that it is taken for granted as the basic mode of secondary schooling by teachers, pupils and parents alike. The teacher expounds a point, explains details on the blackboard, puts questions to munits answers their gueries and directs their written work. But how pils, answers their queries and directs their written work. But how icient is this procedure?

What follows is an analysis of the interaction between teacher and pupils during a normal class. It is by a cybernetician — an expert in the new science of communications and 'control': his perspective is one that is difficult to adjust to at first, but ultimately very illuminating."

from "A Cybernetic View of the Classroom, by John Baldwin

THE INTEGRATED DAY IN THE PRIMARY SCHOOL

An excellent book! The headteachers of an infant and a junior school describe the "integrated day" concept initially set up as an experiment in Leicestershire ten years ago.

The integrated day has a minimum of timetables and schedules, there is plenty of time for the child to develop intellectually, emotionally, socially, and physically at his own rate. The day becomes a whole unit of time, where learning is the only subject. This day is extended by the authors to encompass the whole life of the child during the six years of primary educa-.. and the extensions could go on from there. Detailed descriptions are given of:

the daily organization of the school

the atmosphere and conditions of the classroom

the needed equipment

the setting up of the environment

the keeping of the records

the role of the teacher ad infinitum but not ad nauseam.

"As the children worked in this new atmosphere, the teachers began to see the practical proof of the value of this new climate began to see the practical proof of the value of this new climate in education. They observed the child's excitement in discovery and learning and his willingness to persevere with even an arduous task if he were personally involved. The teachers were surprised by the natural creativity of the children when they were allowed freedom of expression. Subjects and interests soon became integrated quite naturally as children worked out their individual ideas. The school day was gradually being determined by the interests and needs of children and indeed becoming a facsimile of what we now term 'the integrated day'. facsimile of what we now term 'the integrated day'.

"The natural flow of activity, imagination, language, thought and learning which is in itself a continuous process is not interrupted by artificial breaks such as the conventional playtime or "We now realise that much time and energy was wasted in the past by trying to teach a child skills and techniques for which he was not mentally ready. Nowadays we concentrate on giving him experience which will help him to grasp a concept. When this is achieved he will be able to evolve methods for solving problems connected with it for himself, or, if he doesn't, they can at this stage be taught, because he will understand. As adults we know how much more easily we remember facts or acquire techniques which we have discovered for ourselves. or acquire techniques which we have discovered for ourselves. This holds good even more so for children, and we must, therefore, lead them to learn from their own discoveries. It is along these lines that parents today can help their children more than ever before, especially during those precious, formative, pre-school years."

V.M. Greene, headmistress of a London

The material for pages 24, 25, 26, concentrating on British Education, was compiled and somewhat edited by Violet McNeil and Florence Bradford.

ORDERING BRITISH BOOKS
British books can be ordered directly from the publisher, but they usually take 4 to 6 weeks to get to this country. Two other sources in this country can be used for their purchase.

British Book Center Fairview Park Elmsford, New York 10523

Sales Section **British Information Services** 845 Third Avenue New York, New York 10022

subject barriers. The child is encouraged to commit himself completely to the work in hand which he has chosen. The child also has the time to pursue something in depth even though it may take several days. As he works, problems common to various subjects will arise but within the integrated framework he can make easy transition between any areas of

"As the child works, he is involved with learning as an integratas an integrated unit coping perhaps with a foray into maths, science, geography, art or English in a short space of time, through the use of books, material and equipment which may lead him into various channels. Subject barriers are extraneous. No limit is set to the exploration involved, which may go off at any tangent into any sphere of learning. gent into any sphere of learning.

"In a school where the integrated day is in practice, the environment is all-important. It must be so well planned, challenging, interesting and attractive that the child wants to become involved with the materials, wants to satisfy his curiosity and

"In such a classroom, children can work out their relationships with each other and come to terms with their own impulses. There is legitimate outlet for feelings of insecurity, hate, fear, aggression and love in dramatic, imaginative, social and creative spheres. Certain children need this as therapy and to help them towards emotional and social adjustments. The child

I drew round a leaf n to see that the perimeter measured I tried measure the ruler was with a ruler Then I tried too straight strip of Pape with a thin too's traigh but The paper we too teary. Then I tries electic bands but they stretched and went back again. Then tried with a piece of string Diana helped It measured ifoot 103 inches.

An infant solves a problem: from the Nuffield book Beginnings

Subscription \$4.80 a year from: ACE 32 Trumpington Street Cambridge, England



must feel fairly secure within himself and with the social and physical world around him or he will be unable to express himself freely. Within each day there is provision for the natural rhythm of each child where there are times of deep concentration followed by less involved work or relaxation.

"The school is an integrated social unit with all types of children learning to live and work together. Ideally they are free to use the whole of the school and are not strictly confined to one teacher in one room. There must be mutual understanding and respect between the teacher and the child. The teacher's role is that of an adviser and guide. She will often become an active participant and will use opportunities to stimulate further discovery, deeper study, vivid imaginative and creative ideas and thought."

The Integrated Day in the Primary School Brown and Precious, 157 pp. 1968, \$6.00 ** from: Agathon Press, Inc. 150 Fifth Avenue New York, New York 10011



STORY OF A SCHOOL

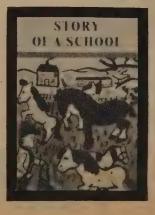
This pamphlet describes a headmaster's experiences with children aged seven to ten. It first appeared 21 years ago, but many of the changes implemented by the author are the very same being attempted today. Story of a School is about a pioneer effort, historically interesting and presently valuable. Mr. Stone has made an easier path for teachers who followed him.

"It is sixteen years since this pamphlet first appeared. Since then its author has become known to many teachers by his work as Organiser in the West Riding, and the sort of school that he had in Birmingham has become much commoner than it was in 1949. Primary Education has been undergoing a great change which is still spreading and developing. Mr. Stone was one of the pioneers and he had to face the difficulties and the criticism that pioneers commonly experience. By his courage and his understanding of children he made an easier path for teachers than the one he had had to follow himself and his book is not only historically interesting but still...

"We found that the children began to dance at home to the music of the wireless — that they did mimes of their own in their backyards. It was with relief that I realised this, because I had moments of real fear that I might kill the inherent interest in this art through bringing it so strongly into prominence in the curriculum of the school. The last thing I wanted to do was to kill the desire to create in any medium which Nature had given the children to use for their own development. I had seen the desire killed so often that, rather than this should happen, I was prepared to cut out miming altogether.

"I would go so far as to say that, unless a child will take and use for his own development those activities which he experiences at school, we have not approached the activity in the right way.

"SPEECH. There came a stage when we saw that in their mimes, in moments of intense feeling, the children were talking to themselves. Lips were moving and the whole facial expression conveyed this desire for speech. And so we encouraged spontaneous speech at these moments. At first, such speech was merely ejaculation — gasps of surprise, short commands, howls of pain, etc. Then at crises in the play, where movements could not fully express what the child wanted to say, we found it easy to encourage speech — more or less in a series of short monologues rather than a definite conversation. Soon these monologues began to flow together



Story of a School Central Office of Information 36 pp., 1949 \$0.25 from: Her Majesty's Stationery Office York House Kingsway, London W.C. 2

WORKSHOP FOR LEARNING THINGS

The Workshop for Learning Things is part of EDC in Boston. They have developed projects involving cameras, animals and printing, but their main contribution is in cardboard carpentry.

Cardboard is gradually replacing conventional building materials — lumber, plywood, masonite — for classroom use. It's no wonder; cardboard is cheap (42" x 54" piece of Triwall: \$1.80), easy to work with, and its uses seem endless. The Workshop developed cardboard carpentry and offers plans, components, and finished product in this medium. They also conduct east and finished products in this medium. They also conduct cardboard carpentry workshops.

Something new from the Workshop is a publication called Fragments. I haven't seen it but it sounds good. 150 cards, each offering an idea for an activity either for an individual or group. The cards come in a cardboard filing box.

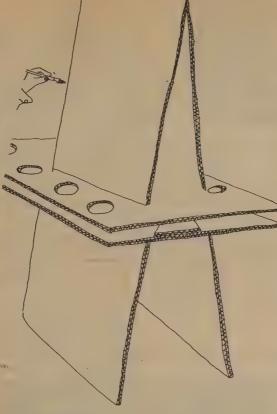
Our Catalog

free from The Workshop for Learning Things Educational Development Center 55 Chapel Street Newton, Massachusetts 02160



"Several years ago, the Workshop ran across triple-thick corrugated cardboard for the first time. We began to design and build with it, wondering how many conventional building materials — lumber, plywood, masonite — it might replace. Since then, we've used thousands of sheets of it, much of it in work-shops working with people using it for the first time. It has given us all a part in shaping learning environments.

"This laminated cardboard is three layers thick and comes in very large sheets. It is inexpensive, compared to plywood, yet it is strong. Used with a good eye for its strengths and short-comings, it can be as durable in a classroom as more expensive comings, it can be as durante in a classroom as more expensive materials. Furthermore, it can be worked with simple tools and requires few or no woodworking skills. The inventory of things made by teachers in recent workshops is endless... chairs, carts, tables, easels, playhouses, jungle gyms, boats, giant globes, cages, aquariums, desks, carrels, seesaws, sand-boxes.... This combination of cardboard, tools, techniques, and people we call Cardboard Carpentry.

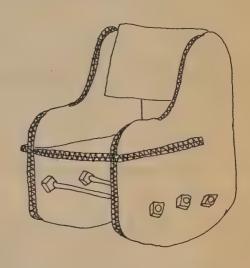


PUBLICATIONS

	.50
ress	.60
ard Carpentry Drawings and Sketches	.60
ord Carpentry Introduction	.60
ard Carpentry Workshop	1.00
chool	.50
Simple — Click and Print	1.00
nts	4.25
alog F	REE!



"It's So Simple — Click and Print was planned, written, and designed by sixth grade children for use as an introduction to using inexpensive cameras in the classroom. It describes such items as camera structure, loading the film, taking a picture, and developing film. The booklet comes in a folder with information about the equipment and methods used by the children"



"You can arrange for a workshop in Cardboard Carpentry either at the Workshop or in your own area by contacting Michelle Greaney at the Workshop for Learning Things, 55 Chapel Street, Newton, Massachusetts 02160."

FOLLOW THROUGH PROGRAM

Junk probably has the widest application for the material environment of the classroom. Project Follow Through at the Educational Development Center has amassed an 80 page list of instructional aids, materials, and supplies for equipping the homemade classroom. An open classroom can be successful without the purchase of any commercial materials. The Follow Through List includes a fair amount of items that are published commercially, but their inclusion is intended as a view of what is available. There may be a charge for

Follow Through Program mailing costs. Educational Development Center 55 Chapel Street Newton, Massachusetts 02160

GENERAL CLASSROOM EQUIPMENT

Elmer's glue Rubber bands Masonite scrap Knives Bottle caps Cups: cornstarch Baking soda Glycerin Food coloring Stones oap flakes Rulers, tapemeasures, yardsticks

metal rings brass fasteners stapler, staples Rubber bands Sand paper Unit block Wax paper Aluminum foil *Hot plate Workbench & vise Paper cutter — one paper cutter per 200 children is ample

*Long arm stapler

* Items to be shared by several classrooms.

Popsicle sticks Tongue depressors Pipe cleaners Dowels Canes **Broom handles** Sugar cubes Plastic bags Peghoard salt

flour

Pencils Scrap: fabric metal plastic

Crayons Plaster of Paris Yarn

Measuring cups & spoons Quarts Rope Ribbon Egg timer Stop watch Minute minder

Spools Peas, beans, seeds

Nails, screws, washers

Macaroni Nuts & bolts

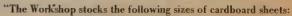
plastic

cardboard

Muffin tins Pens Magic markers Grease pencils Bowls Buckets C-clamp Chicken wire Erasers Containers:

plastic glass jars cartons

bottles jello molds Toothpicks Wallpaper paste Rubber cement



42"x 54" 48"x 72"

48"x 96"

We generally have a supply on hand, but we do not ship it. It must be picked up.



Tri-Wall Corporation will ship orders of 100 sheets or more. Their main office is at One Dupont Street, Plainview, Long Island, New York 11803.

Midwest office: Western office:

Butler, Indiana 46721 7447 N. Blackstone Avenue Pinedale, California 23650"

THE TRINOME

The Trinome is three metronomes in one black box. It provides for 11 basic speed settings, with three different sounds (bell, tick, tock), which may be set individually to play from one to eight beats within a given speed. The three sounds may be used together, so that three different beat patterns may be heard together. Apart from its use in helping musicians to keep time, the Trinome is fun just to play around with.

(Reviewed by Peter Lynn Sessions)





be, surely no teacher can delude himself into thinking that they are either 'art' or 'self-expression'. Such works bear absolutely no relation to the colourful daubs, the soggy messes, the unintelligible splodges that are produced by the same children in a free-activity period which, if properly conducted, has left them completely free. Free, that is, to ignore paint in favour of some other activity if they so wish, but if they choose paint, then free to explore it and to experiment with it and to 'express themselves' in it without contamination by adult interference of any kind. Such experience is invaluable, and in speaking of the art lesson in the junior school, one hopes that one may pre-suppose a wealth of that kind of experience in the infant school.

"From such exploration grows a confidence that may enable certain children to plunge straight in without hesitation when told that they may paint what they like, especially when the materials before them are as varied and enticing and the atmosphere as free as when they were in the infant school: but if this alone were enough, there would be no need for art teachers, or indeed for this book at all. One can bring a horse to water, but one cannot make him drink The art teacher can only do his best to bring his pupils to the stream of knowledge and pleasure thirsting for it, and uninhibited by any fear of drowning."

AN EXPERIMENT IN EDUCATION

After reading through this book I read the back cover review and found that it was as clear and complete as I could hope to be. Sybil Marshal wrote of her eighteen years teaching experience in a one room primary school in a small and poor English town. She recounts in the book how during those years she gradually abandoned her preconceptions about proper teaching methods, and slowly learned what was effective and enjoyable in helping the children to learn, and grow. With her readiness to try new methods and ideas and her increasing awareness of how children themselves learned, she grew and changed herself. Art, in all different forms and variations, occupies a central place in her work with the children. The different ideas and methods that Sybil Marshal evolved can be labeled now as the "inquiry method" or the "project-oriented method", but for her they all grew naturally from her personal experience; and the opportunity to examine this evolution from experience is one of the main attractions of this book



An Experiment in Education Sybil Marshall, 222 pp., 1966 \$2.45 from: Cambridge University Press 32 East 57th Street New York, New York 10022

"It is something of the same kind of blankness that comes over the mind of a child when it is told to 'paint what it likes'. There is a terrifying inability suddenly to select one particular thing from the mass of experience collected and absorbed since the previous day. Left completely isolated and unaided in this overwhelming sea of impressions, the child clutches at the first straw his mind throws up, which is too often something that he has found fairly safe before, or attempts something that some well-meaning but misguided adult has 'shown him how to do'. We all know the result — the endless repetition of the square house with the window at each corner, the smoke from the central chimney always blowing the same way, the 'matchstick' tractor, the toffee-apple trees, and the minute, static train. However careful in execution such pictures may toffee-apple trees, and the minute, static train. However careful in execution such pictures may

"Then there was my timetable. It originated in 'the office', and was brought out to me, a large sheet of expensive ivory paper ruled off into dozens of little boxes, all carefully designed to contain such magic indications of possibilities in school as 'Eng. Lit.', or such depressing one as 'Hymn. Prac.' — each one representing a precious, never-to-be-regained period of time in a child's life. No one has the right to shut the delight of English Literature up in a forty-minute child's life. No one has the right to shut the delight of English Literature up in a forty-minute box, anyway, and to know that Hymn Practice has, willy-nilly, to last forty minutes because the timetable says so is enough to make any child consign any and every hymn writer to perdition forthwith. I am not ignorant of large schools, and know perfectly well that in them such a timetable is necessary, because one class cannot expect to follow its own sweet will at the expense of others, and that there are such things as space and equipment which have to be shared: but I suspect that the timetable worship which goes on in a great many of these larger schools is due to the same reason for which many honest and good men follow the religions of their fathers — it prevents them from having to think things out for themselves. When teacher and class are together for any length of time in a room to themselves, the only real timetable needed is the teacher's conscience, and his consciousness of what it is right he should be doing. He is the only one with his finger actually resting on the pulse of his class, and he only can give it the only one with his finger actually resting on the pulse of his class, and he only can give it what it needs when it will do most good."

IN THE EARLY WORLD

In the Early World is not just another stock narrative of one teacher's experience in the classroom. It is special because the Oruaiti school in New Zealand is a very special place.

It is often heard in education that the product doesn't matter, that it is the process that counts. For Elwyn Richardson, this view is simple-minded. At the Oruaiti school the process of learning is realized through products — the children recognize themselves through the things they make. Creative efforts are integrated throughout the curriculum, aesthetic standards established and maintained.

The book is filled with writing and artwork from the Oruaiti community - and the work is good.

"I had not known that the poetry workshop activities were doing anything other than give the children opportunities to become more proficient in writing. From my point of view I was most interested in assisting the children to work out the developments mentioned. I had not expected recognizable styles to develop, and indeed this only happened gradually and with the more prature children. with the more mature children.

When the children were judging one another's work they always referred to simple images in specific phrases, and never referred to the pieces as a whole. I attempted to encourage a consideration of the whole 'architecture' of a piece now and then, but saw that only a few of the more mature children could do this.

. Allan in the meantime had picked up a large brush and

sat beside Trevor.
"'Can I use this one?' he asked.

"Better ask,' was Trevor's reply as he went on carefully sketching in his design in chalk.

"'Of course you may,' said Dick, 'and here's a screen for you, but will you know what to do and will you be careful?'

"'I was watching,' he said. In ten minutes Allan had fin-ished, even before I realised that he had started. This was his first fabric screen, which he based on nature work.

"The upper form children were reading over written work presented for the magazine, while the number work went on.
One part of the group was listening to the sense of the readings
while the other watched to see errors as the sentences unfolded

themselves.
"'Good sentence that one, but I think those two words
may be wrong: disappoint and realation.'



"'No, disappoint is all right, but the other's wrong. Irene will have to look it up,' said the reader, Mavis.

"'Come off it,' said Brett, 'you should know it has no 'a'.

Relation is r-e-l-a-t-i-o-n.

" 'On the whole, I think that it is a very well written story, and it's interesting enough,' was one of David's comments.

"'I agree with that,' went on Martha, 'and I think we should

give the story a mark of three.'
"'Three's only all right for the magazine, so you don't think it is such a good story, eh Martha?' said the chairman."

'I found that one of the best ways of starting off a new technique such as wood carving was to start to make something for myself. Very soon I would have as many as genuinely wanted to work in that material. I began the making of small ceramic brooches in the same way.

"I did not give instructions before the children began writing, nor did I choose subjects for them. If they chose to write about a bird they were studying, I encouraged them to think about the possibilities of doing a line block or a painting with about the possibilities of doing a lino block or a painting with it. Sometimes the story was written after the picture. I revised the poetry that I introduced to children then, and was careful to exclude all poetry especially written by adults for children. To some extent I followed this pattern in the short stories that I read to the classes, but saw that the stories of such writers as Kipling and Kenneth Grahame and others like them were valuable. In nearly all cases we felt that this adult writing especially written for children was a poor substitute for their own expression and that the influence of that sort of work was likely to hold up natural development of children. As well, it was more than likely that 'childish' poetry and story would destroy children's ability to know good work from bad."

In the Early World Richardson, 217 pp., 1964 \$7.95 from: Pantheon Books 7201 F. 50th Street New York, New York 10022







convinced that you can make almost everything you Jy, but we are also convinced that most people would r buy everything they could make. These are free cata-from some of the major producers of kids' playthings; some of the items are good, some are outlandish ripoffs, but the catalogs themselves can be used to get ideas for materials for child-play.

free from:

COMMUNITY PLAYTHINGS Rifton, New York 12471

CREATIVE PLAYTHINGS Princeton, New Jersey

CHILD CRAFT EDUCATION CORPORATION

964 Third Avenue New York, New York 10022

CONSTRUCTIVE PLAYTHINGS

1040 East 85th Street Kansas City, Missouri 64131



Geo-D-StixTM

The polyhedron illustrated is only one of the building possibilities afforded by this collection of wood rods in different lengths and colors, when joined by flexible, star-shaped vinyl connectors, 370 pieces in all. Illustrated instructions included. All rectilinear geometric solids can be assembled. NS167 / 1 lb 1 oz / \$4.95

FlexagonsTM

Art and mathematics meet in this architect-designed kit, 180 square, triangular and pentagonal cards are joined on slotted edges with rubber bands to make an endless variety of geometric and representational forms. Heavy chipboard in bright colors. NQ116 / 1 lb 14 oz / \$5.95





V20 Variplay Triangle Set, all pieces

\$44.50

7.75

9.25 14.75 .25

7.75

shown in photo at left, 56 lbs

V16 Small Triangle, 10 lbs V17 Steering Triangle, 16 lbs V13 Triangle Long Board, 15 lbs V14 Triangle Short Board, 11 lbs

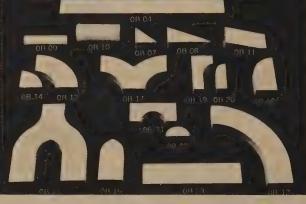
V11 Large Triangle, 10 lbs

CRYSTAL CLIMBERS

Three basic forms with a new dimension, beauty and creativity. Made of clear, colored, tough plastic, all 3 sets can interlock with each other to form endless creations of beauty. Each box complete with plastic storage tray.

No. 3335 Squares (24 squares, 12 Doubles) 1½ lbs. No. 3336 Rounds (30 Large, 18 Extra Large) 1½ lbs. No. 3337 Cylinder (20 pcs.) 1½ lbs. No. 5500 Deluxe Set (62 pcs. of all shapes) 3 lbs.





Childcraft Kindergarten-Primary School Set. For 20 children. 23 shapes, 760 pieces. OB 357—Full Set—430 lbs.
OB 358—Half Set—215 lbs.
OB 359—Quarter Set—107 lbs. \$235.00 . 119.00 . 62.00



Community Playthings





Black Family Hand Puppets.
Unusually lifelike, these soft, flexible hand puppets are not painted versions of Caucasian figures but have genuine ethnic features. Their realism encourages children to express their thoughts and feelings freely in dramatic play. Scaled to fit the hand, they are easy for any child to manipulate.

90 234—214 lbs. \$12.00

GAMES AND PUZZLES

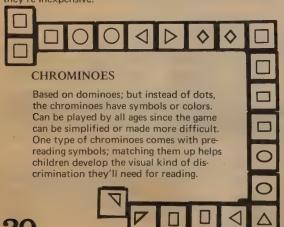
A classroom should be a rich educational environment, full of materials which stimulate the individual to learn. One way to enrich a classroom is by leaving games and puzzles around.

Games and puzzles have more educational merit than many other classroom materials.

They teach problem-solving skills;

they provide for individual instruction and are self-correcting; they're appropriate for all ability levels; they're highly motivational; and

they're inexpensive.





KRYPTO — a less complex math game than Equations (at least the instructions are easier to understand) - can be played by one person or many.

\$1.00 Special arrangements made for teachers.

> MAKE YOUR OWN GAME - Decks of playing cards with blank faces. \$1.00

> > EOUATIONS

EQUATIONS

From the makers of WFF'N PROOF, equations is a cross between scrabble, yahtzee, and craps. The object: solve the equation before your opponent, by eliminating possible solutions.

EQUATIONS available from: WFF'N PROOF P.O. Box 71 New Haven, Connecticut 06501

All other games from:

Products of the Behavioral Sciences, Inc. 1140 Dell Avenue Campbell, California 95003



BALI BUTTONS - a logic puzzle. The object is to arrange the buttons so that there will be no duplicate color and no duplicate shape in any straight line of four



MADAGASCAR MAD-

NESS — a geometry puzzle. Four pieces make a square; the object is to make another square from those pieces plus the fifth one.

\$1.00



BLOCKWORD CROSS a vocabulary-spelling puzzle. The picture shows an incorrect solution. When you do it right, you'll have words ver tically and horizontally. Each side of the blocks is a different color with different letters, so it's really 6 different puzzles.

\$2.00



LOONY LOOP - Only one of the staff has solved this one. The rest of us keep coming back to it — frustrat-ing but fun.

\$2.00



COMPUTERS IN THE CLASSROOM

How do kids get access to computers? Get a terminal and talk via telephone to a time/sharing computer system or buy your own mini-computer. The most commonly used terminal is a Teletype ASR 33 — buy one or rent one. Computer time will cost \$5 to \$20 per hour that the terminal is connected (via tele phone line) to the computer. Watch out for telephone line charges. They can eat up 1/4 to 1/2 of your budget.

If you are going to run the terminal more than 2 or 3 hours a day — don't! Instead, buy or lease a mini-computer for less than \$10,000 or a 4 terminal time-sharing system for about \$25,000. Better yet — lease it for 25 - 30% of the purchase price per year. At the end of 5 years, it's practically yours.

FREE OR INEXPENSIVE MATERIALS

CARDIAC stands for CARDboard Illustrative Aid to Computation. This small gadget used to develop computer games is

from: your local friendly Telephone Company School Program Office

You and the Computer is a booklet free to teachers in limited quantities

from: **Educational Publications** General Electric Company Schenectady, New York 12305

Introduction To Programming and Introduction To Data Communications are two books free with a good pitch

Digital Equipment Corporation

146 Main Street Maynard, Massachusetts 01754

DIETZGEN PROGRAMMABLE CALCULATOR

The gap between the calculator and the computer is amply filled by the programmable calculator or, as the salesman is likely to call it, the "desk-top computer." By any name, it can likely to call it, the "desk-top computer." By any name, it can be operated manually like an ordinary calculator or automatically, under control of a stored program, like a computer. For school use, insist on a <u>card reader</u>. It permits you to prepare programs off-line, by punching holes in a card (using a paper clip or a pencil). This can be done anytime — anyplace. Then feed the program into the calculator through the card reader and you are ready to go!

Dietzgen calculators are state-of-the-art instruments - they come in two flavors, display or printing.

The 7400P is a display model with 3 working registers, 10 memory registers, and room for 128 steps. 12 pounds. \$3480 including a card reader.

* The 7410P is a printing model with 3 working registers, 10 memory registers, and room for 128 or 256 steps. 22 pounds. \$4170 with 128 steps and card reader. \$4500 with 256 steps and card reader

The prices shown are list - look for an educational discount

of 6% or better.

The instruction set is very rich — there are more than 120 built from:

Berkeley Enterprises, Inc. in operations act is very rich — there are more than 120 built in operations including 9 conditional branch instructions (<, >, =, flag, sense switch, etc.) and a bucketful of function keys: square root, X factorial, 1/x, a^X, LOG₁₀, LN, SIN, COS, SIN-1, COS-1, RECTANGULAR TO POLAR COORDINATES & TAN-1, ZX, ZX2. Handles numbers in the range 10-99 to 1099 with up to 14 significant digits.

> EUGENE DIETZGEN CO. 2425 North Sheffield Avenue Chicago, Illinois 60614 (312) 549-3300

TECNICA EDUCATION CORP. 655 Sky Way San Carlos, California 94070 (415) 592-4661



(This page was suggested, compiled and reviewed by Bob Albrecht)



BUSICOM CALCULATORS

We used to lay out \$500 or more for an electro-mechanical cal-culator. Don't — for the same money or less you can buy an electronic calculator that does more, doesn't jam and rarely breaks down. Busicom calculators are machines that any kid (or adult) can figure out. Each key has <u>one</u> and <u>only one</u> nu-meral or operation symbol — the equals sign isn't all mixed up meral or operation symbol — the equals sign isn't all mixed up with the other symbols. To solve a problem, you just key it in like it is, 3+4=? or 2-5=? or $2\times3\times4=?$ or whatever. Four models are available — the best calculators I've seen for school use. But I'm still looking. with the other symbols. To solve a problem, you just key it in like it is, 3+4=? or 2-5=? or $2\times3\times4=?$ or een for school use. But I'm still looking.

The 120DB lists for \$595, but don't pay more than \$500.

BUSICOM, USA, INC. 31 East 38th Street New York, New York 10016 (212) 689-4925

TECNICA EDUCATION CORP. 655 Sky Way San Carlos, California 94070 (415) 592-4661 -

COMPUTERS AND AUTOMATION

A magazine with a conscience. *Computers and Automation* is neavy on social comment and humanistic uses of computers. Every August issue focuses on Computer Art; every March is sue on Computers in Education.

Computers and Automation thrives on controversy — try these: "The Assassination of President John F. Kennedy: The Application of Computers to the Photographic Evidence." (May '70—a dynamite article); "The Vietnam Peace Game: Computer-Assisted Simulation of Complex Relations in International Relations." (March '67); "Underestimates and Overexpectations." (August '69—analysis of the impossibility of developing a workable computer system for the ABM).

Get it without the annual directory (an extra \$9.00 per year) \$9.50 per year, \$18.00 for 2 years.



How do you keep up with the computer science? Read Computerworld — weekly. New products, new applications, new companies, mergers, failures. The Wall Street Journal of the computer industry.

> Computerworld Subscription rates: \$9.00 for one year, \$20.00 for three years.

Computerworld, Inc. 25 E. Chestnut Street Chicago, Illinois 60611

≰ MY COMPUTER UNDERSTANDS ME

Kids turn on to calculators and computers. Give them computing machines and stand back — they'll do arithmetic, solve problems, create systems, compose music, simulate real life, invent games — experiment — discover — learn.

To do it, they need hardware.

* Calculators

* Programmable Calculator

* Computers or Terminals

Programmable Calculators

* Computers or Terminals connected to a computer

TELETYPES

Teletypes are rugged, dependable, easy to use, and noisy - the Volkswagens of computer terminals

Teletype Model ASR 33

About \$90/month from your local telephone company

Teletype Corporation 555 Touhy Avenue Skokie, Illinois 60078

Acoustically coupled Teletypes let you talk to the computer using any old telephone — in the school — the home — the of-- a telephone booth.

> Purchase: \$1250 - 2500 \$45 - 135 per month Lease:

*Anderson-Jacobson 2235 Mora Mountain View, California 94040 (415) 968-2400

*Com Data Corporation 7544 W. Oakton Street Niles, Illinois 60648 (312) 692-6107



Mini Co more dep one term nal system per year. Mini Computers keep getting smaller, faster, more powerful, more dependable, and less expensive. You can start small with one terminal and add terminals as your needs grow. A 4 terminal and add terminals as your needs grow. nal system costs about \$25,000 or leases for \$6000 to \$7000

DATA GENERAL CORP. Southboro, Massachusetts 01772 (617) 485-9100

WANG LABORATORIES 836 North Street Tewksbury, Massachusetts 01876

TECNICA EDU 655 Sky Way San Carlos, Cali (415) 592-4661 TECNICA EDUCATION CORP. 655 Sky Way San Carlos, California 94070

DIGITAL EQUIPMENT CORP. Maynard, Massachusetts (617) 897-5111

Terminals can be hardwired to the computer or connected by means of a data set over the telephone system. The system can expand to 16 terminals, including Teletypes, XY plotters, card readers and Cathode Ray Tubes.



CREATIVE PUBLICATIONS

Most students think math is dull and purposeless; this feeling stems mainly from the way it is taught. *Creative Publications* distributes mathematic enrichment booklets and games designed to reverse the "yech math" attitude.

Eureka, by Dale Seymour and Dick Gidley, uses cartoon characters, interspersed with mathematic curiosities to present problems covering a wide range of difficulty. The book moves from optical illusion patterns and an IBM 704 read out of 2,000 decimal places of PI to problem topics, covering every thing from topology to probability.

Creative Constructions and Line Designs are books of designs and patterns, the kind I always wish my doodles looked like, but never do. All of the constructions are based on simple geometric relationships and intricate use of line segments.

Creative Publications also offers many games and puzzles: Krypto, WFF'N'Proof, Soma, Mem, and other math Lab Materials.

Catalog free		
from:		
Creative Publica	tions	
P.O. Box 328		
Palo Alto, Califo	rnia	94302

Eureka , .	\$3.00
Eureka Teacher's Guide	1.00
Creative Constructions	1.00
Line Design	1.00

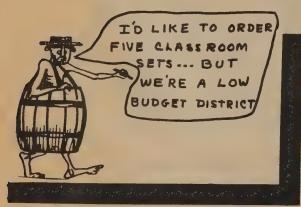
NEPHROID

on a base circle and are tangent to one diameter of that circle, This curve is a two cusp epicycloid.

In this drawing the centers of the outer circles divide the base circle into forty-eight equal arcs.



R. S. BEARD



BATTERIES AND BULBS

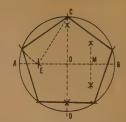




- a) WHAT IS THE MAXIMUM NUMBER OF REGIONS FORMED BY THREE INTERSECTING CIRCLES?
- b) WHAT IS THE MAXIMUM NUMBER OF REGIONS FORMED BY FOUR INTERSECTING CIRCLES?
- c) WHAT IS THE MAXIMUM NUMBER OF REGIONS FORMED BY N INTERSECTING CIRCLES?



INSCRIBING A PENTAGON



- In a given circle 0, draw a diameter AB.
 Construct D as perpendicular bisector of AB.
 Bisect DB. Label its center M.
 Using M as a center and DM as a radius, draw an arc intersecting AD at E.

CUBE ROOT







THE BEAUTY OF THE BOOK WAS THAT THE STUDENTS WERE MORE ANXIOUS TO WORK THESE PROBLEMS

SCIENCE STUDIES

McGraw-Hill is a big company with good taste. Their Webster division distributes commercially prepared Elementary Science Study Materials, which are fairly inexpensive. Their catalog is free.

from: Webster Division McGraw-Hill Book Company Manchester Road Manchester, Missouri 63011

EJELEMENTARY SISCIENCE SISTUDY

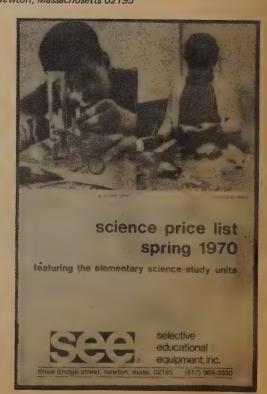
BONES



SEE

When I was in Boston checking out materials, everyone I met told me to see SEE. I never went, but I did receive their catalog. Like McGraw-Hill, SEE distributes Elementary Science Study Materials, however, they offer "seeconomy kits" to spread the original purchase throughout several classrooms without having to buy separate units. SEE also offers low priced magnifiers, microscopes, and simple science experiments at rock bottom prices.

Catalog free Selective Educational Equipment 3 Bridge Street Newton, Massachusetts 02195



CUISENAIRE MATERIALS

Finding Cuisenaire Rods among the trash of published educational materials is like finding a \$20 bill in an old pair of seldom worn pants. It is a true integrative tool

Without any knowledge of mathematical symbols, children can learn and understand mathematical concepts and relationships using the rods. The rods are rectangular blocks of different colors. By arranging the rods by colors, general relationships of addition, ratio, reciprocals, sets, factors, etc. are revealed. For example: If six white cubes placed end to end equal 3 red blocks which equal 2 chartreuse rods which are the same length as 1 green rod, then the principle of factors will have been real-

The importance of the rods is that the relationship between measures and numbers is learned first. The universal relationships are learned not by being verbally taught, but through personal discovery

Cuisenaire puts out a Classroom Kit and a Home Mathematics Kit. They also publish a number of guides for teachers.

(Try making your own -



Cuisenaire Materials Using the Cuisenaire Rods Jessica Davidson \$6 95

Mathematical Awareness John Trivett \$1.95

Mathematics With Numbers in 6 books by C. Cattegno Colors \$1.50 each

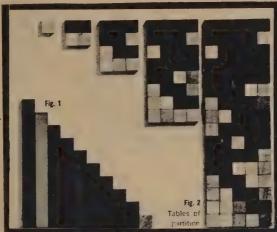
Cuisenaire Classroom Kit \$59.50

Home Mathematics Kit \$12.50

from:

Cuisenaire Co. of America 12 Church Street New Rochelle, New York 10805





NUFFIELD MATHEMATICS PROJECT

Nuffield Mathematics aims to devise a contemporary approach to mathematics with stress placed on How to Learn; the focus is to set children free to make their own discoveries, instead of learning from mysterious drills.

The materials fall into three categories:

Teachers' guides which cover three main topics: Computation and Structure, Shape and Size, and Graphs Leading to Algebra.

Weaving guides are single concept books which give de-tailed instructions or information about a particular subiect.

Check-up guides which are individual check-ups for individual children. These guides are only partially completed and are being prepared by a team from the Institute des Sciences de l'Education in Geneva under the general supervision of Piaget.

"The same concept is met over and over again and illustrated in a different way at every stage. The books do not cover years, or indeed any specific time; they simply develop themes and therefore show the teacher how to allow one child to progress at a different pace to another. They contain direct teaching suggestions, examples of apparently unmathematical subjects and situations which can be used to develop a mathematical support of children's work and suggestions for class. cal sense, examples of children's work and suggestions for class discussions and out-of-school activities."

The changeover to new ways of learning brings its own problems. The guide, I Do and I Understand, faces these problems and attempts to show how they can be overcome. This guide helps to impart the necessary information to assist the teacher through the initial steps of this program.

TEACHING GUIDES

I Do and I Understand	\$1.95
Pictorial Representation	2.25
Graphs Leading to Algebra	2.50
Beginnings	2.50
Shape and Size (1&2)	2.50
Mathematics Begins	2.25
Computation & Structur	e

WEAVING GUIDES

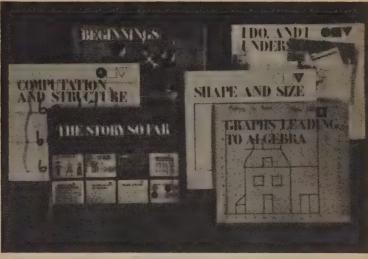
(1&2&3)

Desk Calculators	.93
How to Build a Pond	1.75
Environmental Geometry	3.50
Probability and Statistics	2.50

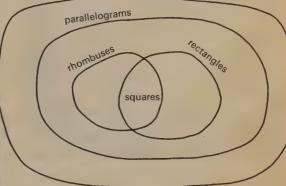
2.50

Nuffield Mathematics Project

John Wiley & Sons 605 Third Avenue New York, New York 10016



quadrilaterals



FREEDOM TO LEARN

Freedom to Learn is a Bible for anyone teaching mathematics. After reading this book, I finally understood "student-centered", "discovery method", "active learning" and all the other similar phrases floating through contemporary educational jargon. Edith Biggs and James MacLean, promoters of "learning by doing" tell us how to do it.

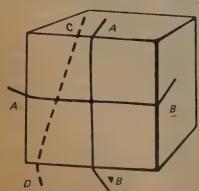
Freedom to Learn is the kind of book you work with. Every thing is covered: classroom needs, equipment, planning, eval-uation, the role of the teacher, setting up workshops, and a look into the future. Mathematics is both a subject and a ve hicle in Freedom to Learn. The book makes for good teachers

Freedom to Learn Biggs and MacLean, 206 pp., 1969, \$7.70 Addison-Wesley 2725 Sand Hill Road

Menlo Park, California



Determining a square face with string



Geo-Board

On your geo-board make all the faces and base of a triangular prism.

2/ Some of the faces are alike. What shape do they have?

Count the number of sides on one triangle. How many sides do you have on a rectangle?

Students may use elastic to recreate the shapes of faces, answer the questions either orally or on paper, then check their answers.

Face Finding

am shaped like the flat surfaces on some solids. Make solids that have faces shaped like me

The wide use of assignment cards should be viewed as a transitional period in the development of a program that is pupil-centered rather than subject-centered. It is a firm and quite lengthy bridge between the exclusive use of a textbook and the ultimate goal of using the real life expe-

riences of children to provide the necessary stimuli for learning.

"On many occasions children can be making use of the immediate environment for a specific mathematical purpose. On the other hand, an organised visit may take place for a totally different purpose, perhaps in connection with a local study, yet mathematical possibilities may appear. Incidental opportunities also exist in other circumstances. For example, a group of ten-year-old boys were engaged in some work on flight. One morning two of them were bird-watching in the school field, taking particular note of flight manoeuvres. They went back morning two of them were bird-watching in the school field, taking particular note of flight manoeuvres. They went back into school, collected a stop watch, and made some records of the number of wing beats per minute of all the different kinds of birds they could see. Then they compared this data with that obtained from counting the number of footfalls per minute as the fastest runner in the class ran across the field. From this point onwards, there was plenty of mathematics involved.

The aim in all this work must be to cultivate in teachers and children alike an awareness of the possibilities that lie within the environment in order that full use be made of it."

from I Do and I Understand

EDMUND SCIENTIFIC

Edmund Catalog looks like an inside cover of a comic book. yet it is a great source for anyone equipping himself or his classroom with low-cost science and math gimmicks and gadgets. Their catalog is free.

Edmund Catalog

from: Edmund Scientific Company 100 Edscorp Building Barrington, New Jersey 08007



COLOR KITS

Produce secondary color effects and an endless variety of moiré patterns. 8 patterns, each in 3 different colors (magenta, yellow, and cyan) on 3 clear plastic sheets. A black-and-white opaque print and a solid black image is also included for each pattern. A total of 40 impressions on ten, 7½/7 x9½/7 sheets. Instructions.

Series (A) Patterns 1 to 8 No. 60,530 \$12.50 Ppd.

Series (B) Patterns 11 to 18 No. 60,531 \$12.50 Ppd.

For Experimenters With Limited Budgets. Pattern (4) on 5 sheets; 3 colors, 2 in black. No. 48,821 \$2.00 Ppd.



THIS BIRD HAS A THERMAL ENERGY

THIRST

No. 60,264 \$1.00 Ppd.

STAINLESS STEEL FINGERTIP WRENCHES

No. 50,348 \$2.50 Postpoid





Perfect for the photo darkroom ideal for table fountains, waterfalls, etc. Operates on 1 or 2 flashlight batteries

Operates on 1 or 2 flashlight batteries

This miniature (14% × 25%) electric motor and pump is ideal for schools and club experiments. A great book to the photo darkroom and particularly important in color development. Base of pump is placed in liquid. Pumps a continuous flow up to 1 pint per minute through tube 12" high (4" tube included). Can be used in either direction. Impeller is more efficient when rotating counter clockwise. Self priming. With 2 flashlight batteries in series, it will pump liquids to a height of 24" (not a 24" high stream). Runs for 48 hours on one battery. Not convertible to AC-DC.

Can be used in many ways including: circulatory of adarkroom chemicals, table fountains and displays, model waterfalls, hydroelectric installation, canal locks, water filtration and aeration for flash tanks, flow models of circulatory systems, automatic plant watering units, humidifiers, etc. No. 50,345 \$2.25 Postpoid.

Battery Heider. Ideal for use with above. See page 53.



TRANSMISSION, REFLECTION, DOUBLE IMAGE & PROJECTED IMAGE HOLOGRAMS You've probably been reading about LASER-PRO MOLOGRAMS. Now, you can own one very inexpersive produced from a flat graphic film. Effectively demonstrates fascinating graphic principles.

ASTOUNDING, YET STILL IN ITS INFANCY

VERY EASY TO SEE AND DEMONSTRATE

Reconstruct these holograms with the light from projector or a high-intensity desk lamp and cluded monochromatic filter. When you look thro hologram the image appears in 3-D against a dar ground. Change your angle of view by moving head and the image also changes its perspective the background. It's uncanny to see a 3-D pict duced from a flat film or glass plate. Instructioncluded for building viewing box and using 35n jector as light source.

Jector as light source.

4 TYPES AVAILABLE . . GET THEM TODAY
Transmission Type (pictured above) produces chessmen
scene beyond the hologram.
Prejected Image Type. Dinosaur scene is projected in
front of the hologram.

Deuble Scene Type. 2 scenes; dinosaurs and geometric
shapes recorded on same film. View them separately by
rotating hologram 180°.

Reflection Type. Place light source in front of hologram.
Scene of geometric shapes is reflected beyond hologram.
Filter not required.

Type	Apprex, size	Stock No.	Price Ppd.
Transmission-film	21/2" x 4"	41,090	\$ 4.50
Transmission-film	4" x 5"	40,969	11.00
Transmission-glass	4" x 5"	48,384	30.00
Transmission-film	8" x 10"	60,687	45.00
Proj. Image-film	2½" x 4"	41,832	7.50
Proj. Image-film	4" x 5"	41,095	15.00
Dbl. Scene-film	24/2" x 4"	41,891	7.58
Dbl. Scene-film	4" x 5" .	41,894	15.00
Reflection-glass	- 4" x 5"	41,093	30.00

*GREEK TRAVEL PHOTOS

This is a set of four beautifully-colored travel photos of Greece. Each one is 27x39 inches and portrays one aspect of life in Greece. Single copies are available to teachers and librarians only.

Greek National Tourist Office

GLASS

All About Glass (what it is, types of,	
manufacturing of, etc., illus., 1967, 42 pp.) (8-A)	238
This is Glass (6-A)	238
The History of American Glass (past and present	1100
glass making, 4 pp.) (7-A) 2	1130
Glass the Miracle Worker (history, current	
types and future, 18 pp.) (8-A)	1021
Sand & Imagination (story of development of glass	
and glass products, 1967, 44 pp.) (6-A)	238
and glass products, 1407, 44 pp.7 (0-A)	
Engineering With Glass (variety of uses in	238
engineering, illus. 1967, 32 pp.) (10-A)	
Billions of Bottles (10-A)	141
Billions of Bottles (10-A)	141
The Story of Glass Containers (teaching unit on glass) (4-7) S	624
The Story of Glass Containers (7-A)	141
Importance of Lead in Glass (reprint on the value of lead	171
in glass, technical, 14 pp.) (12-A)	676
Corning Glass Works 1967 Annual Report	
(includes history and summary, 36 pp.) (10-A)	238

Be Sure to Mention this Book in Your Letter

FREE TEACHING MATERIALS

Every kid knows that if he writes to a few businesses, a couple of chambers of commerce and some embassies, he'll get a lot of mail. This Guide lists a lot of places that will send you stuff from Natural Rubber Wall Charts to Knots and their Uses. This cost is \$9.75, however; for \$2.50 plus postage you can get the *Catalog of Free Teaching Materials*. It doesn't have the descriptions of Educators Progress Service, but the list of things are here all the same.

Catalog of Free Teaching Materials

Gordon Salisbury, 270 pp., 1970. \$2.50 plus postage from:

Catalog of Free Teaching Materials P.O. Box 1075 Ventura, California 93001

Elementary Teachers Guide to Free Curriculum Materials \$9.75

from: Educators Progress Service, Inc. Randolph, Wisconsin 53956



65 W 5300

If I wasn't a catalog freak, I wouldn't be doing what I am doing. Ward's puts out a good catalog for the biological and the

Earth Sciences - rocks, charts, maps, kits, animals, plants, lab

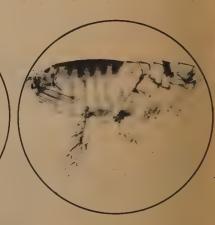
Ward's Natural Science Establishment, Inc.

Catalog free from: Ward's Natural Science Establishment, Inc. P.O. Box 1712 Rochester, New York 14603

P.O. Box 1749 Monterey, California 93940







92 W 6600

DENOYER-GEPPERT CATALOG 70

WARD'S CATALOG

equipment - good reading.

Denoyer-Geppert deals mostly with charts and models. The prices are high, but the materials are designed to be bought by schools that can afford the stuff.

It is a pretty catalog with lots of laughs. In their Anatomy and Physiology section you are immediately greeted by the "Talking torso" — "He introduces students to the systems of the body and explains how to take himself apart." The torso comes comes in Negro or white skin tones. You can get a sexless torso or a male or female torso or a combination torso. In this catalog they list a "New! Full Torso [female] with pregnancy." So the students can find out how the torso got pregnant they include (for \$98.00) a nine part, cross-sectioned kit of the reproductive organs "in an attractive carrying case."

The catalog lists lots of other charts and models in biology, earth sciences, zoology, astronomy. If you can't afford their materials, at least write for their catalog.



92 W 6582 Each, 1.20. . . Ten, 10.80 Glossina sp., w.m. Glossina, the Tsetsefly, is the carrier of African Sleeping Sickness of man and domestic animals.

 Melophagus ovinus, adult male or female, w.m. Sheeptick, lousefly, or ke

92 W 6592 Each, 3.25. . . Ten, 29.25 Glossina sp. Head with mouthparts,

92 W 6593 Each, 1.65, ... Ten, 14.85

Nosopsyllus (Ceratophyllus) fasciatus, male, w.m. Common rat flea, one of the carriers of bubonic plague. 92 W 6600 Each, 1.20. . . Ten, 10.80

> Denoyer-Geppert Catalog 70 free from. Denoyer-Geppert Times Mirror 5235 Ravenswood Avenue Chicago, Illinois 60640

INQUIRY DEVELOPMENT PROGRAM IN EARTH SCIENCE

This package was developed for SRA by J. Richard Suchman who conceived the concept of inquiry development.

For the most part, students are left alone to examine various geological problem areas (Monument Valley, Finger Lakes). By means of photographs, maps, films, sand, streamtables, and rocks, simulations are created in an attempt to explain the processes by which parts of the earth's crust attained their present

How could you make a mountain?

Suppose you pile a lot of stuff up in a heap? What would your mountain look like?

Where would you get the stuff to pile up? Would that leave a hole somewhere?

Could natural mountains have been made in this way?

Who or what did the piling up?

Where would the stuff have come from?

Kids are encouraged to find their own problems and formulate their own scientific theories to explain with the materials as they recreate the world in the classroom.

"There is no single, ideal approach to inquiry. Each student is free to come to grips with the problem in terms that are meaningful to him. Some people like to have a broad base of data before they begin to theorize; others begin theorizing almost at once, revising their theories as they go. It helps to have class discussions about such strategies of inquiry after the children have experienced inquiry for a period of time children have experienced inquiry for a period of time."

Dick Suchman believes that kids learn best when "they are left alone to mess around with lots of different stuff." He has incorporated this belief into the earth sciences kit — here is a list of "the stuff" included: (the stuff is Suchman's, the prices are

Thirty Problem Books Fifteen Resource Books Thirty Idea Books Orders from Individual					
For a typical thirty-student class you will need:					
	3-9458	Technicolor Projector 810Z (super-8 with still picture clutch)	216.67	162.50	
		(standard-8 console motion picture viewer with rear projection screen and still picture clutch)	372.67	279.50	
	3-9359	(standard-8 with still picture clutch) Technicolor Projector 600AD	\$179.34	\$134.50	
	3-9358	Technicolor Projector 800ZD			
	3-9436	Developing Inquiry in Earth Science	1.60	1.20	
	3-9445	Sand Set (2 Buckets)	33.33	25.00	
	3-9407	Streamtable & Accessory Kit	153.33	115.00	
	3-9404	Teacher's Guide Classroom Kit	6.00 160.00	4.50 120.00	
	3-9408	Student Kit	53.27.	39.95	
	3-9401	Films (set of 25 super-8 mm)	527.00	395.25	
	3-9402	Films (set of 25 standard-8 mm)	527.00	395.25	
	3-9405 3-9406	Resource Book	1.04	78	
	3-9409	Problem Book	\$ 5.68 5.68	\$ 4.26 4.26	
	,,,,,,		List	Net	

Orders from Individuals are billed as list prices. Orders from Institutions are invoiced at net prices. from:

Science Research Associates, Inc. 259 East Erie Street Chicago, Illinois 60611

One Developing Inquiry in Earth Science Chicago, One Projector (Technicolor, super-8 or standard-8)

One Classroom Kit
One Streamtable and Accessory Kit
One Sand Set

Thirty Idea Books
One set of Films
Fifteen Student Kits
One Teacher's Guide

At first some of the prices seem high, like \$33.00 for two buckets of sand, but there are 8 different coarsenesses of sand and most of the rest of the kit is well put-together and fairly reasonably priced.

A group of three students has gathered around the table with the rock and mineral samples on it. After examining the profiles of the monuments in the Problem Book, they go into a discussion of the differences between various kinds of sedimentary rock. They turn to the rock samples to determine for themselves some of the differences.

S10: Most of the rock seems to be sandstone, siltstone, mudstone, and shale, according to the book

Su: Here is a hunk of sandstone.

S10: Shale is clay that has been pressed together. It always comes in thin, flat sheets.

\$12: It says on page 7 that siltstone and mudstone are similar to shale.

S11: The slate seems harder than the sandstone. I can rub off little specks of sand from the sandstone, but the slate won't rub off.

S12: Yeah, but it splits into sheets pretty easily.

S₁₁: Well, look at the cross section in Figure 1-8. top of softer stuff.

S10: All the monuments have places where the sides are straight up and down and other places where the slope is on an angle. Let's look and see if all the angle stuff is made of softer rock and the straight stuff is harder.

S12: It couldn't be what you said before, because there is sandstone in the straight layers and in the angle layers.

S11: Yeah, but where it is straight there is nothing but sandstone, and in the angle layers there is lots of stuff, a mixture of sandstone and other rock

S12: But this sandstone sample isn't very hard. Why do its layers have straight sides?

ELEMENTARY SCIENCE STUDY

tion in the past few years.

Science education is increasingly moving away from textbook

training and cookbook laboratories. ESS has been develop-ing fascinating science units that make advances in both mate-

rials and teaching methods for elementary learning. Many of

the units developed are available commercially from McGraw-

self, scrounge the materials things to do in the classroom.

Hill (see page 35), but ESS also publishes inexpensive working papers (available through them). These papers are do-it-your-

They contain hardly any manual-type instructions and are not laden with preconceived scientific "truths."

ESS also puts out a newsletter free with current information,

feedback, book reviews and news of interest. This group has

probably been the most influencial catalyst in science educa-

A Shaving Mirror Telescope

See ... halfway up there is a layer of sandstone. Then there is shale right on top of that and then another layer of sandstone on top of the shale. The sandstone must be harder or the shale wouldn't start wearing back right above the sandstone. It seems like the sandstone is a kind of protection on

From the ESS book, Teacher's Guide for Tracks

Elementary Science Study Norking Papers

Batteries and Bulbs II An Electrical Gadget Suggestion Book

Budding Twigs

Children Printing

Davtime Astronomy

Earthworms

Heating and Cooling

Match and Measure

Mosquitoes

Musical Instrument Recipe Book

Optics

Sink or Float

Slips and Slides

Starting from Seeds

Tracks (Teacher's Guide)

Track Picture Book

Whistles and Strings

An Interview with Dorothy Welch \$1.00 each, except "Batteries and Bulbs" which is \$3.00.

Working Papers

Elementary Science Study 55 Chapel Street Newton. Massachusetts 02160



In creative writing classes, the emphasis is usually on writing; Making It Strange concentrates instead on helping students develop the creative thinking that forms the basis for good writ-

"To Make It Strange is to Make the Familiar Strange - to distort, invert, or transpose the traditional ways of experiencing the secure and familiar world. The result is a new look at the same old world. In the familiar world, objects are always right side up; the child who bends and peers at the world from be-tween his legs is experimenting with the Familiar Made Strange. A tree usually is seen as a solid in space, but an artist consciously may invert the world to see the tree as a hole carved within the solid block of air. While art and literature have long recognized the role of metaphor for seeing the world in a new way, MAKING IT STRANGE uses metaphor as the basis for a new approach to the teaching of creative thinking and writing.

"Writing involves the creation of ideas and the clear expression of these ideas. Writing becomes difficult for students who either lack ideas for stories or who have good ideas that are difficult to put into words. In MAKING IT STRANGE analogies and metaphors are the mechanisms for finding ideas for stories and for putting these ideas into words. They are connectors that permit comparisons to be brought to bear in order to develop new ways for the student to see himself and his surroundings."

"Which WEIGHS more?

A BAG OF POTATOES

Why?

THE ART OF THE POSSIBLE

The major thrust of these social studies workbooks is to show students how to develop constructive alternatives for their attitudes. Included are readings about such people as Helen Keller, Claude Brown, and Kamala, the "Wolf-girl", who were or were not able to invent ways to transcend their environ-ment. Special emphasis is put on showing how metaphorical alternatives lie at the base of constructive change. From time to time in the material, students are drawn into the actual ex-perience of themselves developing real life alternatives for their own attitudes and behaviors. The books are designed for grades 7 through 10.

KNOCK OUT!

Write a story about two men who are fighting over payment of a gambling debt. BE THE THING! In this story you are the violence that starts the fight and keeps it going.

Imagine you are the fight itself. You are not one of the two fighters in the fight. You are the violence that takes place between them. The two men are loud and angry. One of them claims to have won a bet. The other refuses to pay. It's late at night with no one around. They are standing on a dark, city street. As the argument becomes more and more heated, what happens to you? As destructive violence, what things do you feel? Remember, you are the fight itself.

TARBADARAS SARAKA BASAS SASAS SARA

MAKING IT WHOLE

This "systems" material is the ultimate in integrated learning, both in theory and practice. It connects the subject areas of social studies, music, math, art, science, and language arts, giving students a powerful sense of the unity of learning. The exercises show students how one subject area is understood in terms of the metaphors and analogies drawn from another sub-ject area. For instance, students learn American history by developing parallels and contrasts with subject matter in science. Synectics suggests that except in the case of very progressive schools these systems materials be introduced in the elementary grades where teachers are accustomed to being responsible for a variety of subject areas. The course was designed primarily for sixth grade but could be used in grades four through

"In this part of SLIPPING AND SLIDING you will compare the way a piece of music develops with the reproduction

Now listen to the first movement of Beethoven's Fifth Sym phony. It is probably the most famous piece of music in the world. It opens with a short, four-note melody which is reworld. It opens with a short, four-note melody which is repeated more than 800 times by all the instruments. Beethoven builds the whole movement around this tiny four-note structure, always changing it slightly as he goes along. Now close your eyes and listen to the many different ways 'da-da-da-dum'' is used in this short selection.

(Teacher Plays Beethoven Tape.)

The beginning of Beethoven's Fifth Symphony will be alared eggin. This time a your listen to the

played again. This time, as you listen to the music shut your eyes and imagine amoebas splitting and popping as they repro-

"If the English army had fought with lawnmowers, what would the American colonists have been?_

Explain your answer:

Imagine you are a spider who is trying to spin a web on a rainy, stormy day. BE THE THING! As the spider, what does the storm do to you and how do you feel about it?



SYNECTICS EDUCATION SYSTEMS

Every human being carries around a vast amount of knowledge. but a good deal of what we know is never used because it exists as isolated bits of information - a storage bank of facts. The Synectics approach to learning not only helps students to drav upon their own banks of information and experience but trains hem in a process of thinking and learning which enables them to use metaphors and analogies to make connections which deepen and expand their knowledge in all areas, and help to integrate the external and internal worlds. The *Synectics* approach is described most fully in The Metaphorical Way which is reviewed on page 5 of this catalog. The materials on this page make use of that process in a number of different ways to facilitate learning and creativity in a number of subject

Making It Strange (1, 2, 3, &4) \$1.32 each, list price \$.99 each, school price from: Harper and Row School Department Keystone Industrial Park Scranton, Pennsylvania 18512



Invent-O-Rama **Facts and Guesses** Making It Whole The Art of the Possible \$15 each (up to 5) prepaid \$2.00 each (5 to 30) prepaid

Synectics Education Systems 121 Brattle Street Cambridge, Massachusetts

SYNECTICS BASIC COURSE

This is a written problem-solving course that is programmed for individuals to use at home. The course consists of tested exercises where individuals can respond to metaphorically based evocative questions. It starts off leading neophytes by the hand through the Synectics problem-solving process; and by the fifth unit the individual is on his own.

"...let's say I am trying to solve the problem of how to make a roof change its color for efficient reflection and abmake a root change its color for efficient reflection and absorbtion. I say to myself, 'What is an example of something that changes color?... A flounder. How does he do it?... Under his skin are chromatophores that cause his color to change. When the black pigmented chromatophores push to the epidermal surface, his skin becomes dark. How make a roof like this?... Bury white flexible microcapsules in a black asphalt roof. When sun hits the roof the white microcapsules will expend and push through the black scapabil reaching the will expand and pop through the black asphalt, making the roof white — like a flounder. When it's cold the microcapsule shrink and the black asphalt covers them.'"

Why is this fruit like you?_

the best way to get to know ZERO is to BE it. Close your eyes and imagine that your whole body is in the shape of ZERO. You have leaned over backwards and grabbed your feet with your hands.

How do the muscles of your body feel in this position?

As ZERO, you have your own idea about how you should As ZERO, you have you own the about how you should look. A clumsy person writes you in a messy way.

After he finishes, you look like this.

How do you feel about that?

What parts of your body work hardest to get you back to your proper shape?

"You are lying in the chamber of the outlaw's gun. You are about to be fired. Remember, you are the bullet. What thoughts rush through your mind as the outlaw takes aim?

FACTS AND GUESSES

"Many students see no connection between their personal feelings and experiences and the text book world. FACTS AND GUESSES is designed to put interest and personal meaning into science. The exercises will let you make your own connections between yourself and the facts and theories of

You will not be expected to sit back and be on the receiving end of a 'fact-pump'. You can memorize facts; but that doesn't mean that you know what to do with these facts. . . Comparisons are connectors which will enable you to connect the facts and feelings of your experience with the facts which you are learning. This fact-using process is like the discovery process of great scientists. FACTS AND GUESSES will give you a feeling for the experiences of great scientists and inven-tors at their moments of discovery."

"BULKY PRECISION could describe

an elephant balanced on one foot

because the elephant is huge but his balancing act

requires great precision.

"How is a fly's metamorphosis like the food chain in the

How is a fly's metamorphosis unlike the food chain in the

"SWITCH IT ON!

Now, imagine you are a photon. You can do most everything a wave and a particle of light can do; but you seem to be doing it in a little different way. On the next page, write a story that describes yourself. First, make sure you understand the science of a photon. If you don't know the details of something it's difficult to write a believable story about it. Explain to your reader how you were born; what you did during your life; and how your body feels as you are reflected and refracted. Make your story read as if it were the autobiography of a light particle. Put yourself into the details of the particle theory. BE colorful. BE bright. BE light." Now, imagine you are a photon. You can do most every



MAN: A COURSE OF STUDY

This is an incredibly fine course. I know of nothing in the field that even approaches it. It's developers describe it as "a fifth grade social studies program that asks questions." The questions are important ones; they center on man and what it means to be human.

"What is human about human beings? How did they get that way? How can they be made more so? In an age of burgeoning technology and automation, our future may well depend on whether or not the next generation of Americans cares about such questions. This course cannot give final answers, for no one completely understands the nature of man. Our aim is to give children a 'permanent relation' to the questions, to get them thinking about the concept of humanness and man's capacity to become 'more so.' "

The people who designed the course obviously respect children. There is no talking down and no side-stepping of "delicate" issues. Students are provided with the same data that leading social scientists now use and they discuss some of the same questions that these scholars are now asking. Through film they observe baboons in their natural environment and Eskimos going about their daily lives; there is no commentary to tell the students what to think. They observe and discuss and question, just as scientists must do. They are also provided with a variety of source material; they read the field notes of Dr. Irven DeVore, made in Africa while he was studying and photographing baboons; they hear the songs and stories of the Netsilik Eskimos; and they read the journal of Knud Rasmussen, famous Danish arctic explorer.

This may sound pretty heavy for fifth graders, but the children love it. Teachers who've used the course say that their students became extremely excited and enthusiastic about it.

The materials for the course are extraordinary — both in quality and variety. They are a joy to read, regardless of how old or young you are. The presentation is simple, but the ideas are powerful, and the materials provide for a wide range of abilities and interests. The full set of materials includes 16 films, 22 booklets, plus records, filmstrips, maps, photomurals, slides, games and projects.

"Contrast is powerful pedagogy. It is with this in mind that we begin our study of man by learning about other animals—the salmon, the herring gull and the baboon. Children become





quite familiar with the life cycles and behaviors of these animals; but what is most important is that an examination of the many questions raised in this part of the course ultimately gives perspective to things that children take for granted about themselves — the need for learning, the ever-presence of parents, the helplessness of babies, the power of language.

The animal materials lead into an intensive study of one human society — the Netsilik Eskimos of Canada. Study of man in this remote and sustern setting costs certain features of his

The animal materials lead into an intensive study of one human society — the Netsilik Eskimos of Canada. Study of man in this remote and austere setting casts certain features of his humanness into sharp relief: the extraordinary resourcefulness and flexibility of man's technology; the unique capacity for interchange in his social organization; and the fertility of the human mind, with which man is able to design and symbolically express a comprehensive view of the world. Add to this the fact that man's cultural inventions and acquisitions are transmitted from generation to generation through language, without the aid of genetic programming, and one begins, perhaps, to touch upon the essence of man's humanness."

Second, we hope that his course will awaken in children an awareness of the fact that what we regard as acceptable behavior is a product of our culture. In judging others, particularly those of different cultures, children must learn to know when their judgments, and the judgments of all men are shaped by the culture in which they live."

"Our most intense pedagogical conviction is that oversimplification and dogmatism are the twin enemies of creative thought. Premature closure on a productive question can destroy imagination, and 'concepts' should always lead children to new explorations or they are worthless. Ideas, like facts, will have a short life in memory if they are not assimilated by the child in his own way. The private world of children must be nurtured, not uprooted. Our problem as teachers is to frame the question clearly, which is often no more than asking the right question.



"... We have designed some activities so that children can confront their own emotional reactions to what they are learning — discussions of the sexual behavior of animals, for example, or the aggressiveness of baboons. In the Netsilik study, children confront senilicide as a moral dilemma and consider the prevalence of killing in a society where game animals are the principal source of food.

More important than the opportunities we have provided, however, are those discovered by the sensitive teacher. The best time to discuss an emotionally laden issue is when children openly express their concern. One thinks of innumerable examples: the ghetto child deeply engrossed in the study of her-



ring gulls, who suddenly looks up and asks, 'What happens if his parents don't come back? Can the little chick peck on another herring gull's beak and get some food?' Or the argument that breaks out in the suburban classroom over whether Eski-



mos are human if they encourage their children to kill animals... These are the rare and vital times when children assimilate knowledge in a deeply personal way, when thought and feeling join and ideas which once were foreign become their own. In an ultimate sense, it is to encourage learning of this kind that we have built this course."

"Our major aims in Man: A Course of Study are twofold. First, we wish to stimulate children to think about the nature of man. . . We hope that these studies will provike students to reexamine what they think they know about themselves and about human beings generally. By comparing man to other animals and by studying man in a cultural setting different from our own, they may reflect upon the deep structure of human experience, the common impulses and ways of coping with life which unite man as a species beneath the surface diversity of culture, and the biological ties that unite man with other living creatures.

EDC provides training for teachers who use *Man: A Course of Study.* The course is very expensive and would have to be purchased by a school district. However, you can get a complete set of children's booklets and Teacher's guide for \$9.00, or an introductory paper and two sample booklets for \$1.00. Send check payable to Educational Development Center, Inc. to:

Man: A Course of Study Education Development Center, Inc. 15 Mifflin Place Cambridge, Massachusetts 02138



GEOGRAPHY IN AN URBAN AGE UNIT 1 GEOGRAPHY OF CITIES

We haven't seen this unit in use in a classroom; but feedback from those who have is highly favorable. While the unit is called geography, its scope is broad enough to take in a good deal of sociology, history, economics, and city planning. The materials should suggest a wide range of questions about how and why human beings create different types of environments for themselves.

The unit is very carefully planned out, complete with educational objectives and suggestions for evaluation for those who like such things. However, for those who like more freedom for themselves and their students, it should be possible to use the material as a taking off point to explore a number of questions more deeply. For example, the suggested optional activities include a unit on migrants to the city which deals with the Negro ghetto of Chicago, a local shopping survey, a local community study, and a unit on megalopolis. Each of these activities could easily get students interested in questions and activities going beyond the scope of the course. It seems like a good way to help them master the basic points of urban geography so they'll be better equipped to get on with the important job of improving their own invironment.

The materials themselves are intriguing and should generate lots of excitement. Perhaps the most exciting thing in the unit is a large plastic Modulex map board (see picture) on which you can construct a city. The map comes with trays of plastic building blocks which represent different types of structures, e.g., single family dwellings, commercial, manufacturing, and government buildings, etc. The students read a narrative describing the birth and growth of Portsville (based on what happened in a real city on the west coast of the US) and build models of the city as they think it might have looked at the end of each of four historical periods. In the end, they can check their ideas against a map of the actual development of the city (maybe they'll find they planned better than the city fathers!). But the map is a great resource, you needn't be limited to a single use of it. It can also be used to build an ideal city, an awful city, a city controlled by industry, a city controlled by the military, anything you want to make it. We almost didn't get a picture of it because we became so fascinated with building a city that we nearly forgot what we were supposed to be doing.

Other materials in the unit include lots of maps, graphs and tables; transparency masters for such topics as "Shopping Trips for Food, Kitchner, Ontario", "Chicago Police Districts", and "Chicago Public Health Districts"; and stereograms with stereo viewers (three dimensional aerial views of several cities — a real turn on).



Geography in an Urban Age Teacher's Kit \$240 Student Kits 5.97 for materials needed for two students from:

Macmillan Company Order Department Front and Brown Streets Riverside, New Jersey 08075

YOUNG FILMMAKERS

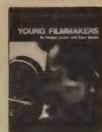
Rodger Larson's concern is providing young people with opportunities to express themselves. The medium is film — the range and means within are wide and varied. As he says: "The choices made by the young filmmaker depend greatly upon where he is in our society, where he lives, who his family is, and what school he goes to." Rodger Larson encourages each young person to be an artist and develop his own style and methods. He shares with us some of the numerous ways his students have made their films, and we gain insights into the learning processes — how knowledge becomes relevant as it is needed — how quickly kids learn to manipulate technical materials in original ways. The work is exciting, and as learners we respond enthusiastically.

The last half of the book is devoted to teaching and/or giving suggestions about operating the camera, lights, and taperecord ers; editing techniques and effects; and developing the movie story — the director, script, actors, sets and props.

Rodger Larson's patience with young people and faith in their work affect all aspects of the workshop — the equipment provided, the way it is set up, the protection against unnecessary distractions, the firm attitude that all completed films should be distributed.

His approach is a way of life, and one I deeply respect.

Young Filmmakers
Larson & Meade, 190 pp., 1969
\$5.95
from:
E.P. Dutton and Co.
201 Park Avenue South
New York, New York 10003



"Two movie directors give me the same sense of joy that I get from my students. Both men are prime contributors to the growth of filmmaking. Andy Warhol and the late D. W. Griffith share a startling originality. They approach film as if no one had ever made a movie before. I think young people have this same independence, and it becomes them."

"The filmmaker is Alfonso, and at nineteen he had made three films. He writes his scripts in a fine hand, neat, tight, and sharp. The movies come out the same way. They are beautifully constructed and very telling. The End, his third film, candidly expresses how he feels about social forces that surround and sometimes press upon him. The film begins with his good friend, Benny, and a poster showing President Johnson astride a motorcycle (it is one of those posters made by putting together bits of photographs to make a fake picture). Alfonso had cut a slit over the President's pocket, and the first shot shows Benny lifting a joint of marijuana out of that pocket.





Benny lights the joint and falls into a marijuana reverie in which he becomes a song-and-dance man with two lovely girl partners. Then without warning he is thrust behind the steering wheel of a broken-down auto, and he tries to kid himself that he's driving a high-powered sports car. As his reverie progresses, Benny's wish for a happy world is captured in a newspaper headline that announces the legalization of marijuana. He kicks up his heels and jumps for joy. Two men appear, one a grubby angel who thrusts the Bible into his hand, the other an attractive devil who wants to give him a free supply of drugs. In the midst of the conflict that these two arouse in Benny, he meets a hippie policeman who asks for a light for his own joint.





"Then, as in many dreams, things take a turn for the worse. Images of war and death beset Benny. He is frightened of the angel, devil, and cop and tries to run away, but they run after him. Hissing bullets are heard on the sound track. Benny awakes to find himself in his apartment. In answer to a knock on the door he peers through the peephole and is confronted first by an angry Vietcong soldier and then by young ROTC trainees marching down a field.

He recoils from the peephole. The final sequence shows Benny throwing up his hands in disgust, then the word 'life' (taken from the magazine cover) going from misty to sharp focus, and then the words 'the end' flickering on and off. This is a superficial description of Alfonso's film. Much is left out. For example, one image that really gets me is the first sight of the devil, dressed in elegant white top hat and tails, as he rises up from a row of stuffed-to-overflowing garbage cans (photographed during a New York City sanitation men's strike).

A GUIDE FOR FILM TEACHERS TO FILMMAKING BY TEENAGERS

This is an excellent guide for setting up a film workshop.
Rodger Larson explains how he began making films with teenagers in New York City. He provides a structural model — the 16mm equipment that is needed, suggestions on how to start out new filmmakers, the steps in making a film. Film teachers will find his ideas helpful and important. The booklet lacks adequate information about Super 8mm equipment and its use. We will attempt to provide more information about Super 8 in the future.

"A solidly based, adequately financed facility is required if a community is to profit fully from the film experience. Both teacher and students need the security of a little place of their own which will be around long enough to develop its own traditions and will allow many youngsters to pass through its doors."

"When the opportunity is first presented to him, the teenager responds to the idea of making a movie, but rarely has a script in mind; he has yet to discover how to express an idea on film. The whole notion of film production is immediately exciting to him and it becomes the teacher's fundamental responsibility to help give this vague excitement direction and substance."

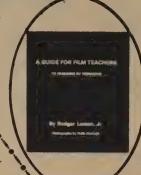
"The film director can control the cast of characters and determine what happens to them. He is omnipotent. Is it any wonder, then, that he becomes deeply committed to having this film realized?"

"The film director is at the center of a good film and the workshop should reflect this viewpoint."

A Guide for Film Teachers to Filmmaking by Teenagers

New York, New York 10009

Rodger Larson \$1.00 from: Hannelore Hahn Dept. of Cultural Affairs 830 Fifth Avenue





FILM MAKING IN SCHOOLS

For teachers and new filmmakers who feel they need some direction in beginning their first films this book may be very helpful. Douglas Lowndes introduces our eyes to the medium. The still camera, 8mm camera, and 16mm camera. He explains the possibilities of each instrument and suggests possible exercises.

The book is oriented around classroom filmmaking. Many of Lowndes' ideas are geared towards working with a number of children in a lesson plan step by step method. Group filmmaking — in which the story ideas and its execution in a film is the responsibility of several people — provides many ways for young people to learn how to work together and to express themselves. However, when Lowndes develops longer projects, he, unfortunately, encourages the teacher to make many decisions. The teacher becomes the filmmaker-director and the students are his workers. They learn the techniques and how to talk about films, but where is the fun of creating and being artists?

Take the author's initial filmmaking plans and grow. Follow your own feelings and perceptions.



Film Making in Schools
Lowndes, 128 pp., 1968
\$8.95
from:
Watson-Guptill
2160 Patterson Street
Cincinnati, Ohio 15214



"Technically speaking, this film is an editing marvel. Although it runs only ten minutes, it includes many different scenes and moments in time. Transition shots, which move the action ahead, are masterfully executed in a variety of ways: reoccurring flash frames (two or three frames that appear on the screen for a fraction of a second and are perceived almost subliminally) of the stern face of LBJ flicker ominously, as if haunting Benny; swish pans hurtle us from scene to scene; purposeful jump cuts (which condense time by implying complete actions that are not shown in entirety) reveal the tension and underlying anxiety that Benny continually seeks to escape."



The Youth Film Distribution Center

Many of the 60 16mm films in the collection have been made by young people at the New York Film Club of the Young Filmmaker's Foundation; the Movie Club of Henry Street Set tlement; the Film Unit of the Studio Museum in Harlem; and the Buffalo, New York, Channel of Soul. The collection also includes many films described in Rodger Larson's Young Filmmakers. The movies may be rented for \$1.50 a minute — minimum \$10.00. Black and white films (color somewhat higher) may be bought for \$10.00 a minute.

Some of the films include: Memory of John Earl, 8 minutes, John McFadden, age 18. The recreation of an actual encounter between the filmmaker and a white store owner in Mississippi.

That Rotten Tea Bag, 4 minutes, Andy Gurian, age 13. A satire on protests and people who protest.

The Thief, 7 minutes, Raymond Esquilin, age 19. A boy steals money to go the movies only to be haunted by his victim everywhere he tries to spend the money.

Soldier's Revolt, 4 minutes, Jayson Wechter, age 16.
A play within a movie. This tension-building film revolves around two soldiers, one black, the other white, who are ordered to kill each other.

For a complete catalog and information concerning distributing new films made by young people, contact:

The Youth Film Distribution Center 43 West 16th Street New York, New York 10011



YOUNG FILMMAKERS

Especially suited for audiences ages 7-12.

Young Filmmaker's Exchange

These 16mm and Super 8mm films have mostly been made by young people in the high school film groups. They may be rented for one day at the following prices: film one to seven minutes — \$6.00; films seven to eleven minutes — \$8.50; and films twelve minutes and over - \$10.00.

Films may be submitted to the exchange at any time by mailing them to the address below. In all cases, films will not be held longer than ten days and films not listed on the Exchange will receive critical evaluation and suggestions wherever possible.

Some of the current films:

There's A Lonely Old Man, 16mm, silent, 3½ minutes, Jody Scott and David West. A colorful, high-spirited spoof which employs fast cuts shot from television, comics, money, magazines, and animated groceries to provide a context for an inventive and quite original use of graphics. Jody and David interweave a "story" made up entirely by calligraphy-letters which squirm and dribble, which create their own space and perspective, which are a sheer delight to watch.

Gawd's Country, Super 8mm, silent, color, 3½ minutes, David Weinberger. This film is constructed through the animation of paper cut-outs, from magazines, and from original drawings. It is a colorful comment on contemporary attitudes, issues, and media and a fine example of what can be achieved through the use of simple equipment and simple cut-out forms.

Hallway, Super 8mm audio-tape track, color, 12 minutes Joseph Dougherty. The piece is a highly developed, ambitious attempt to capture the feeling of powerlessness so frequently experienced by teen-aged youth. The film uses the metaphor of an endless corridor to explore childhood, young manhood, and the arrival at a sign at the end of the hall demanding: "I want you for the US Army." He runs, discovers he is fenced in — in fact, that he has been "fenced in" all along — and finally makes a break for it out in the open.

For a complete film list check the monthly periodical, Media and Methods, or write to the Exchange.

> Young Filmmaker's Exchange 2031 Pine Street Philadelphia, Pennsylvania 19103





Yellow Ball Workshop

The young people in the Yellow Ball Workshop make animated films. Their movies include a wide range of inventive techniques and effects through their use of papier mache characters and sets, cut-outs and flip cards. The simplicity of their approach - film and materials - makes filmmaking fun for 5 year olds and adults.

The Yellow Ball Cache is a collection of 13 of the animated films. It may be rented for \$18.00, and bought for \$150.00. Color, Sound, 16mm, 18 minutes. Several of the films are

Witchcraft, 50 sec., Georgena Brioso 9, Kathy LaFreniere 12, Alice Robinson 14. A witch sends her monster servant to capture a princess. He is successful. The witch laughs delight-

Look Before You Leap, 50 sec., Michael DeGregorio, Steve and Arthur DeTore. A gambler loses all his money at Blunderland Race Track. He walks to the edge of Suicide Cliff, groans, gulls out his empty pockets, jumps over the side. At the bottom of the ocean, he bumps into a treasure chest full of gold, but it's too late. He has a cannon ball tied around his neck. Air bubbles rise to the surface spelling THE END.

The Iceberg, 40 sec., Dawn Foster 9. A ship hits an iceberg and cracks up. In the last scene we see a mother furiously rowing a boat full of children.

The Tree Bears, 1 min., 20 sec., Judy and Joyce Rubin 7. Charming, frantic narration by Dawn Foster. Goldilocks is a

Yvonne Anderson Yellow Ball Workshop 62 Tarbell Avenue Lexington, Massachusetts 02173

MEDIA & METHODS

The magazine does a good job of keeping us posted about new ways to work in film, videotape, television, music -

Media & Methods 134 N. 13th Street Philadelphia, Pa. 19107

is published 9 times a year, \$5.00





FILMS FOR RENT

Pyramid Films Santa Monica, California 90406 (Try an American Time Capsule — a film by Charles Braverman, over 200 years of U.S. History in 3 minutes . . . WOW)

Fleetwood Films, Inc. 34 Mac Questen Parkway South Mount Vernon, New York 10550

662 North Robertson Blvd. Los Angeles, California

National Film Board of Canada Suite 819 680 Fifth Avenue New York, New York 10019

1714 Stockton Street San Francisco and California 94113

American Documentary Films, Inc. 336 West 84th Street New York, New York 10024

and 379 Bay Street San Francisco California 74133

Films about Black Liberation, Vietnam, Mexican-American Struggle, Cuba, Spain and Latin America, Capitalism and Domestic Protest, Imperialism and War, Africa, China.

Contemporary Films/McGraw-Hill Princeton Road Hightstown, New Jersey 08520

and 1714 Stockton Street San Francisco, California 94113

Films Incorporated

1144 Wilmette Avenue

Wilmette, Illinois 60091 Documentary films

Brandon Films 221 West 57th Street New York, New York 10019

and

Western Cinema Guild, Inc. 244 Kearny Street San Francisco, California 94108

Psychological Films 205 West Twentieth Street Santa Ana, California 92706

A series of films about different therapy methods — Rollo May and Human Encounter; Frederick Perls and Gestalt Therapy; Abraham Maslow and Self-Actualization. Rentals between \$15. - \$50. per film.

A collection of films examining some of the critical issues confronting America today - many NET films. Circulation Department Indiana University Audio-Visual Center Bloomington, Indiana 47401

Audio Film Center 34 MacQuesten Parkway So. Mount Vernon, New York 10550

406 Clement Street San Francisco, California 94118



FREE FILMS READY FOR BORROWING

Educators Guide to Free Films

Cross index — subject guide and titles — good for reference. Lists 49,443 films.

\$10.75 post paid Educators Progress Service Randolph, Wisconsin 53956

Association Films, Inc. 600 Madison Avenue and New York, New York

25358 Cypress Avenue Hayward, California 94544

Films about travel, science, architecture, sports, education, health — vary in quality. They have some fascinating films about India, The Netherlands, Germany, and Switzerland.

Also check with city, county, and state libraries.

Many Embassies and consulates have films about their country and films made by native filmmakers. We've heard that the Czechoslavakia Embassy has a collection of animated Czech

The Teachers and Writers Collaborative has developed an approach which overcomes the too-frequent split between literature and language arts, and their Newsletter should be highly useful to anyone working in those areas.

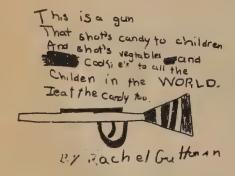
The Collaborative places professional writers in classrooms to work with students and teachers "for the purpose of creating a curriculum which is relevant to the lives of children today and which can therefore make the study of language a living process. . . . the writers assist teachers in encouraging children to create their own literature from their own language, experience and imagination."

The Newsletter is full of suggestions of ways to stimulate kids to write as well as some of the work produced by the students themselves. The writers' techniques are never presented as methods to be rigidly copied; instead we are provided with exerpts from the writers' diaries — descriptions of how an idea originated and was introduced and what happened with the kids as a result; there is a humanness, a fallibility, which encourages teachers to experiment and take some risks. In addition, there are brief articles and diary exerpts which raise some of the broader issues and problems of teaching and writing censorship, the cruelty of children to each other, judging qual-

While most of the writers' techniques and ideas can be applied to any group of children, they are particularly useful for working with kids who have trouble with writing. The *Collaborative* works in New York City, and most of the kids they reach are not at ease with standard English and feel insecure about their ability to write.

The Collaborative's approach to the teaching of language is worth noting; it rests on the assumptions that

- "1) children who are allowed to develop their own language naturally, without the imposition of artificial standards of grading, usage, and without arbitrary limits on subject matter, are encouraged to expand the boundaries of their own language usage;
- 2) grammatical and spelling skills develop as a result of an attachment to language and literature, not vice versa; children who write their own literature and who read the
- productions of other children are more likely to view all literature as an effort to deal with one's experience in creative ways, whatever that experience may consist of."



"My assignment in this class was to design a gun. I was interested in discovering what they thought of guns in light of the campaign to cut down 'violence' on TV programs and the practice of not buying toy guns for children...."

"... To expect them to dislike guns is far fetched considering the violent emotions of childhood. My idea was to turn on their natural interest without overly controling their response. So, I had blank (unlined) paper distributed and simply asked the class to design an imaginary gun on one side of the paper and to write a description of how it worked on the other

"I was amazed by the results. Most of the guns were not de-structive in purpose. One in particular 'shot cookies and veg-etables to all the children in the world.' The engines of destruction which some of the boys devised seem to resemble what the U.S. Army may come up with in 20 years or so."

"BLACK IS THE IMAGE OF LOVE

Black is the image of love loved by the night people loved by the soul people the jazz people alike

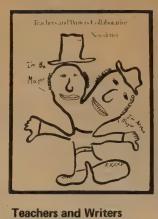
Black is the image of love love by the water boy the shoeshine boy the waiter

Black is the image I love love by you loved by me loved by the Black people most of all'

> /anessa Howard Voice of the Children

"Woman Feminine, afraid Cooks, cries, marries Like little creatures in the night Woman.

> Author Unknown I.S. 55 Ocean Hill - Brownsville Brooklyn



Collaborative Newsletter Subscription rates: \$3.00 for 4 issues; back issues \$1.00 per issue. from: Teachers and Writers Collaborative Pratt Center for Community *Improvement* 244 Vanderbilt Avenue Brooklyn, New York 11205

Tall It Like It Is

Tell It Like It Is EDC, 48 pp., 1968 \$1.08 * from: American Book Company 300 Pike Street Cincinnati, Ohio 45202

This book is so relevant that it's painful. It is a collection of writing and drawings by the children of Cardozo; they tell of the days following the assassination of Martin Luther King Jr. days filled with riots, looting, soldiers, and burning buildings. There are many voices, many emotions. The strength of the book is that these voices are simply presented, not used to prove someone else's point. It provides a means of letting one group of children speak to other children (and any adults who'll listen).

TELL IT LIKE IT IS

thing so we took what we want.

"A soul brother is a black man. But he is a hueman being." THE CENTER FOR SHORT-LIVED PHENOMENA

"I took things because everybody did and we did not have any-

"The saddest thing I saw was a man in a store caved in on him."

"The stores in my neighborhood should have been burned because they cheat people and the storekeepers are mean."

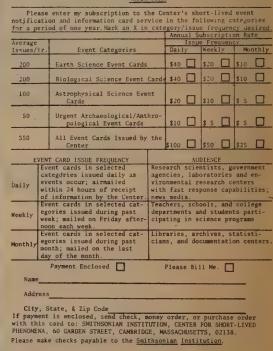
"What is the government going to do about the rioting besides putting troops in the city?"

"I felt that it was the peoples own oppion on what they wanted to do but my own personal oppion, Yes as far as steeling that was OK but when people started burning that went to far. But for over 100 years our ansesters have been slaves for the White man. And if things don't change we will allways be. And so I feel that the this may be the negroes way of reveange."

"The saddest thing I saw was my girl friend stealing."

SMITHSONIAN INSTITUTION CENTER FOR SHORT-LIVED PHENOMENA

EVENT NOTIFICATION AND INFORMATION CARD SERVICE ORDER FORM



The Center is the closest approximation to a real-time global information system generally available as a resource to limited fund school situations. It provides daily, weekly, and monthly report services of events in Earth Science, Biological Science, Astrophysical Science, and Urgent Archae-

For super-pros ("scientists and agencies with fast-response capabilities") and dreamers of the old police-radio moni-toring type, there is a telegram and telephone notification program that would enable any study group to be at the scene of the latest earthquake, meteor crater impact, or red tide. The program recommended to schools is the \$50 a year weekly issue. Each Friday a packet of the event cards of all categories is mailed to arrive at the school by Monday.

ological/Anthropological.

The bias towards short-lived phenomena tends to select those events of the most intense energy (an explosion rather than a burn), and thus the reports highlight the peaks of geophysical and bio-ecological trending. The index to the year's events helps to give a dynamic map of the stress points in the major global systems.

Ball games are documented with up to the minute box scores for general status, conflicts, and significant events. Instant replay is a basic learning resource. CFSLP is beginning to apply these tools to the study of our total environ-

MATCH KITS

Match Kits come from the remarkable Children's Museum in Boston. They are, in a way, mini-museums, but unlike most museums the items are made to be handled and played with. Jsing authentic materials and role playing students create speific unit environments. Excavate artifacts from an ancient

Greek villa . . . drill soapstone with a Nesilik Eskimo bow-drill . . . set up a Japanese family alter and pray to Buddha . . . grind corn to make Algonquin food. 16 MATCH units were eveloped at the museum and are circulated to classrooms at slight rental fees. A few of the units have been produced commercially by American Science and Engineering for sale.

Japanese Family: Family Histories, Family Guide, Role Cards, Instructional Charts, Teacher's Guide, Portable Japanese style Table, Family Album, Japanese Children's Poetry Book and Translations, Magazines, Buddha Statues, Kimonos and other items. \$495.00

The City: seventy-five wooden buildings with magnetic bases, magnetic model board, "magic windows", aerial maps, book, Teacher's guide, worksheets, and a collection of urban photographs with mounting. \$357.00

A House of Ancient Greece: Authentic Coin and Pottery, two filmstrips, Reference Books, Teacher's Guide, Printed material for each Team including four photofinds Booklets, two research Guides, Archeological Notes (summarized from D. D. Robinson's Notes from the actual excavation of the Villa of Good Fortune in the 1930's), and 20 reproductions of ancient Greed artifacts. \$525.00 \$525.00 Greed artifacts.

American Science and Engineering, Inc. 20 Overland Street Boston, Massachusetts 02215

These 3 kits in addition to 13 others are circulated on a loan basis for two and three weeks at a slight rental fee.

Circulating Department The Children's Museum Jamaicaway Boston, Massachusetts 02130



IMPROVISATIONS FOR THE THEATER

Human creativity is what Viola Spolin has been into for something like thirty years. She knows

... what we call talented behavior is simply a greater individual capacity for experiencing . . .

Experiencing is penetration into the environment, total organic involvement with it. This means involvement on all levels: intellectual, physical, and intuitive. Of the three, the intuitive, most vital to the learning situation, is neglected."

Spolin has developed a major set of exercises that really work to elicit spontaneous behavior.

"Through spontaneity, we are re-formed into ourselves. It creates an explosion that for the moment frees us from handed-down frames of reference, memory choked with old facts and information and undigested theories and techniques of other people's findings. Spontaneity is the moment of personal freedom when we are faced with a reality and see it, explore it and act accordingly. In this reality the bits and pieces of ourselves function as an organic whole."

Spolin did her early studying with Neva L. Boyd, whose specialty was children's games and the whole Spolin system is based on the game form. Each game has a problem to be solved, or as Spolin refers to it, a "point of concentration". In attacking this problem in a no blame situation where he is interacting both cooperatively and competitively with others, the player finds his creative powers released.

The system works. The games can be used loosely, but worked with in even approximate order, they present a deepening introduction into the skills of improvisation. The emphasis is theatrical, but connection with some therapeutic and sensitivity techniques on the one hand and children's play on the other are quite strong. I attended one weekend workshop in which Viola Spolin took us through some of the games and there wasn't any question about it: she was a wise enough child to lead the rest of us back to being eight years old.

The book is good enough and contains enough pointers to allow you to use it without ever having seen Spolin in action, and probably even without having had any theater experience.

This book is a winner. There is no other book on creative theater skills that focuses so effectively on developing skills within a group. If groups, spontaneous behavior and improvisation are your thing, this is your book.

The system is so together, that none of the games experienced out of context possesses its full weight. For an example, though, here is one of the approximately 150 games, along with the teaching material Spolin provides.

"GIBBERISH NO. 1 - DEMONSTRATION

One player.

Stands on stage. He is to sell or demonstrate something to the audience in gibberish. When he has finished, have him repeat but ask him to pitch what he is selling or demonstrating.

POINT OF CONCENTRATION: to communicate (show) to audience.

SIDE COACHING: Sell directly to us! See us!

EVALUATION

Was there variety in the gibberish? Did he maintain direct communication with the audience? Did he see the audience or stare at them? Was there a difference between the first selling and the second? Why did pitching bring greater intensity to the player's work?

POINTS OF OBSERVATION:

- Demonstrating or selling <u>directly</u> to the audience must be insisted upon. At first, the player will stare out or look over the heads of the audience. If pitching does not alleviate this, it may be necessary to have the player repeat a few times until he really <u>sees</u> the audience.
 It will become evident in the student-actor's work when his stares become seeing. (cf. Seeing
- and Not Staring, Chapter VII.) Both the audience and the player will experience the difference. An added depth, a certain quiet, will come into the work when this happens.
- 3. Pitching requires direct contact with others. Students will discover this for themselves. If the point is understood, even momentarily, it will be an important breakthrough for many of the students."

(Reviewed by Ken Margolis)



Improvisation for the Theater Viola Spolin, 397 pp., 1963 \$8.59 from: Northwestern University Prèss 1735 Benson Avenue

Evanston, Illinois 60201

THE ART OF THE PUPPET

A beautiful book of Photographs (lots in colour) of the history of Puppetry, with pictures you won't find in any other book. The information is accurate and very entertainingly written. A complete history of puppetry, including new directions in puppetry today.

The Art of the Puppet Baird, 1965 \$19.95 from: The Macmillan Company 866 Third Avenue New York, New York 10022





PLATE 11. AIRPLANE MARIONETTE CONTROLLERS



(Puppetry page suggested and reviewed by William Stewart Jones)

Another note from the layout man:

Bill Jones underplays this book. While laying out this page I spent 30 minutes looking through The Art of the Puppet. It is truly a beautiful book.





MARIONETTES - A HOBBY FOR EVERYONE

An excellent book illustrated with very clear photographs. The chapter on modeling a puppet head is superb. This is the only book that clearly explains making a simple plaster of Paris mold, and how to make a plastic wood cast from the mold. The section on making a papier mache head is good too. The book also covers construction of a marionette, costuming, stringing, stages, and includes a good script of Beauty and the

Marionettes A Hobby for Everyone Beaton, 186 pp., 1948 from: Thomas Y. Crowell Company Tyco Shipping Service, Inc. 788 Bloomfield Avenue

Clifton, New Jersey 07012



THE PUPPETRY JOURNAL

Published bi-monthly. The official publication of the Puppeteers of America, a national, non-profit organization whose object is the improvement of the Art of Puppetry.

Membership in the Puppeteers of America is open to anyone with an interest in Puppets. Annual membership is \$10.00 for adults, and \$6.00 for Juniors (15 years and under). Colleges, Museums and Libraries should write for special rates.

The executive Secretary is Olga Stevens. P.O. Box 1061 Ojai, California 93023



THE PUPPET THEATER OF THE **MODERN WORLD**

A good source of styles of European Puppetry today. Puppetry has reached a much higher level in Europe. This book shows combinations of people and puppets and will stimulate thinking in new directions.

Available through Puppeteers of America.

The Puppet Theater of the Modern World Niculescu. \$14.95

The Puppetry Journal Store 5013 South Union Ashville, Ohio 43103

The Puppetry Journal Store carries many of these books. It can also supply puppet patterns.

Cloth Puppet diagram, by Lewis Mahlmann \$1.00 Stevens-Rose Marionettes Diagram \$1.00 Hand and Rod puppet diagram, by Gayle Anderson Cloth Handpuppet pattern, by Lewis Mahlmann

THE PUPPET THEATRE HANDBOOK

An excellent book. If you can have only one technical book, this it it. Originally written as an Army manual for Special Services, it is still unsurpassed. The *Puppet Theatre Handbook* covers puppet construction of all types including some experimental puppets; costume design and construction; puppet stages; scenery, lighting, properties, and special effects; and brief information on production.



The Puppet Theatre Handbook Batchelder, 293 pp., 1947 \$5.50 from: Harper & Row 49 East 33rd Street New York, New York 10016 Janet Lederman describes clearly, and sometimes poetically, her application of principles and techniques of Gestalt Therapy to "classroom" work, in school, with "difficult" children. She approaches the children as people, <u>real</u> people, and attempts to help them grow with acceptance and the use of Gestalt methods. She succeeds. The book gives hope, not just concerning how "problem" kids can grow, but for me and all of us.

"This book by Janet Lederman is of extreme importance to the educational scene. It presents a vivid, clear and honest account of what can be done to provide real education for those who are usually not only neglected but affected in a powerfully negative way by an irritated educational system. Such students portrayed here by Janet Lederman obviously don't fit into the system. They are a source of irritation and sometimes provoke even stronger emotional reactions. That is why her class exists. Her methods, employing many principles of Gestalt Therapy, work with these students. For this accomplishment alone, an account of her teaching is of major relevance.

However, the importance of this book and the methods it so poetically describes does not stop here. What may be less obvious, but perhaps even more significant for the improvement of education in the classroom, is that what Janet Lederman does should be done by every teacher in every classroom, whatever the social class represented by the students, whatever the intelligence level or academic performance of these students.

"Troy, pretend your mother is sitting in that empty chair in front of you. Tell her what you are angry about. You may say anything you want to say, since she is not really here."

Troy, you begin,

'Mama, you know this meat is raw. I hate raw meat.'

Troy, sit in the other chair and pretend to be your mother. What does she say?

'I didn't know it was raw.'

'Now be Troy again.'

'Mama, you don't do anything right!'

'Now be your mother.'

'I wash your clothes. I iron your shirts so you'll look good for school.'

'Now be Troy again.'

'I know. But I can't eat this hamburger. I'm going to throw it away and make

You continue with this dialogue. You tell your mother what you resent and also you tell her what you appreciate. Your mother is not destroyed. Next, you begin to expand your world; instead of throwing the hamburger away, you discover other 'possible' solutions for the situation."

"... Depending on what you can accept, I either stop you with the awareness of both sides of the situation or you go on to explore other possible ways of behavior which may be more appropriate to the situation."

"But how do you exist for you?
You say, 'I'll beat him up;
then he'll know who I am.'
Anger.
Anger.
That is real for you.
But anger is not usually acceptable in school.
You play 'bully.'
You play 'helpless.'
You say,

'I won't.'

'I can't.'

'You can't make me.'

'You're not my mama.'..."



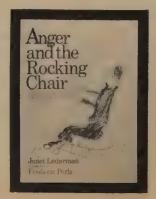
"Each of you carries your own expectation. Each of you has his own image. Each of you tries to avoid what is happening 'now.'."

"I am not here to 'pick up' after you. I am not here to take care of the tools you use, or the games you enjoy. If I 'pick up' after, you will not experience the frustration of missing parts and broken toys. If I take care of your things you will have no way of discovering how to care for your equipment. I will do nothing for you that you are capable of doing for yourself."

"Children, you live in a chaotic world. Your world can expand beyond your chaos. The first step in this process is for you to touch your chaos. You must touch your chaos; you must live through your chaotic experiences in the classroom. You must not avoid these experiences. So often the super-structure of school does not permit this kind of contact. Here and now you are free; you are free to come into contact with your chaos.

'Rearrange the room.''

Anger and the
Rocking Chair
Janet Lederman, 63 pp., 1969
\$4.95
*from:
McGraw-Hill Book Company
c/o Trade Order Service Dept.
Princeton Road
Hightstown, New Jersey 08520
or
8171 Redwood Highway
Novato, California 94947



PLAY THERAPY

Virginia Axline's *Play Therapy* was perhaps a breakthrough when it was written in 1947, but now it has the language and frame of reference of a twenty-three year old book, and its popularity is in part due to the dearth of readable literature on the subject of the disturbed child. Part of the wealth of this book are the several recorded therapy sessions with children although the reader may find the annotations less than adequate at times. (Incidentally, this book should be read before one reads *Dibs*, if one feels compelled to read *Dibs* at all, which I think is a dishonest, misleading, and sentimental work. *Play Therapy* gives you a suggestion of what the therapist in *Dibs* was attempting to do.)

The use of play therapy as one means of helping the disturbed child fight his inner battles is common today, and apparently much of Virginia Axline's writing has been successfully extended and modified by those therapists and others working with disturbed children. It should be acknowledged, however, that one method of therapy, from play therapy to behavior modification, is not the total solution to the disturbed child's confused and convoluted problems, and the advocation of a certain method to the exclusion of others is certainly not very healthy for the advocate

The author's message in *Play Therapy* is simple and almost simplistic. Her clearest and most admirable contention is that the therapist must accept the child completely as he is. Her idea of "self-directed" therapy reveals a basic respect for children as humans, and allows the child, in therapy, control of his own situation. The role of the therapist is to mirror the child's expressed feelings, neither interpreting them nor rejecting them, in order to help the child "gain insight" into what he is feeling and why. During the hour of free play, the therapist simply repeats what the child says or objectively describes what the child has been doing in his play. Once the child clarifies his anger and accepts his feelings, he is on his way to becoming less unhappy and able to deal with his previously intolerable situations at home and school.

From working with psychotic children in a camp setting, I find it difficult to apply *Play Therapy* to those who are severely disturbed. The book promises improvement in too little time. In defining the role of the therapist, the book gives one the false notion that it is a simple matter in forming a relationship with a disturbed child if only one uses play therapy methods. These methods are probably the most moral and human, but forming a relationship is still a struggle. At the camp, for example, any hint of harshness or rejection was amplified in the child's mind. as it should have been; a note of impatience was enough for the child to discard any trust he might have been developing.

The author insists that one cannot be too accepting of a disturbed child and his behavior, and in working with children like those at the camp, total acceptance must be the beginning; but it also must be recognized that in so many cases it takes years for substantial change to occur. The subtle changes in behavior become so important: a smile, a twinkle in a child's eye, a word spoken accidentally. *Play Therapy*, which was written for the layman, is unfair in not offering a true picture of the time and energy involved in therapy and the great possibility for failure in treating the severely disturbed or psychotic child.

The author has a section on play therapy applications to the classroom which is excellent — she speaks of the teacher as therapist and suggests methods of teaching which are not unlike Sylvia Ashton Warner's organic reading, which she has extended to include story writing, painting, arithmetic problems, all initiated and carried through by the children themselves.

"Acceptance seems also to imply an understanding of that never-ceasing drive toward complete self-realization — or complete fulfillment of himself as an individual that is psychologically freed so that he can function at his maximum capacity. An adjusted person seems to be an individual who does not encounter too many obstacles in his path — and who has been given the opportunity to become free and independent in his own right. The maladjusted person seems to be the one who, by some means or other, is denied the right to achieve this without a struggle. Examination of the records indicates this again and again. Sometimes the individual is rejected and brushed aside. Sometimes he is smothered by supportive care that makes it difficult for him to break through the barrier. It seems as though the individuals would not manifest the behavior symptoms that they do unless they were striving to achieve individual status. The ways in which they attempt to do this are varied and many, but there always seems to be some manifestation of the individual's resistance to the blocking of his maturity and independence. Even the dominated child who becomes rigidly dependent seems to be achieving a controlling independence in that way. The 'babied' child, who refuses to learn to read when sent to school, at first glance seems to be fighting independence and maturity. It could be that it is the most effective way that he has discovered to control the situation and is therefore a satisfaction to him because it is an expression of his power to direct and individualize himself. This is a very controversial hypothesis and is presented as an interpretation of the play-therapy records' primary manifestation — that of growth within the individual at all times, unfolding sometimes in an unbelievably short time, but always present in greater or lesser degree.

"(Jack filled his mouth with water. He leaned over and spat it on the floor)

Jack: 'Look. I spit on my home.'

Therapist: 'You spit on your home.'

Jack: 'I spit on my brother. I spit on my father. I spit right in their faces. They wouldn't give me my toys. He broke my gun. I'll show them.'

Therapist: 'You are very angry with your brother and your father. You would like to spit right in their faces because of the way they have treated you.'

Jack: 'They broke my gun. They had a new rug back home. Look. I'll spit on the rug. I'll get it all wet. I'll ruin it. And my brother's new suit! I'll spit on his new suit and I'll ruin that.'

Therapist: 'You'll ruin the new rug and the new suit. You'll get even with your father and your brother.'

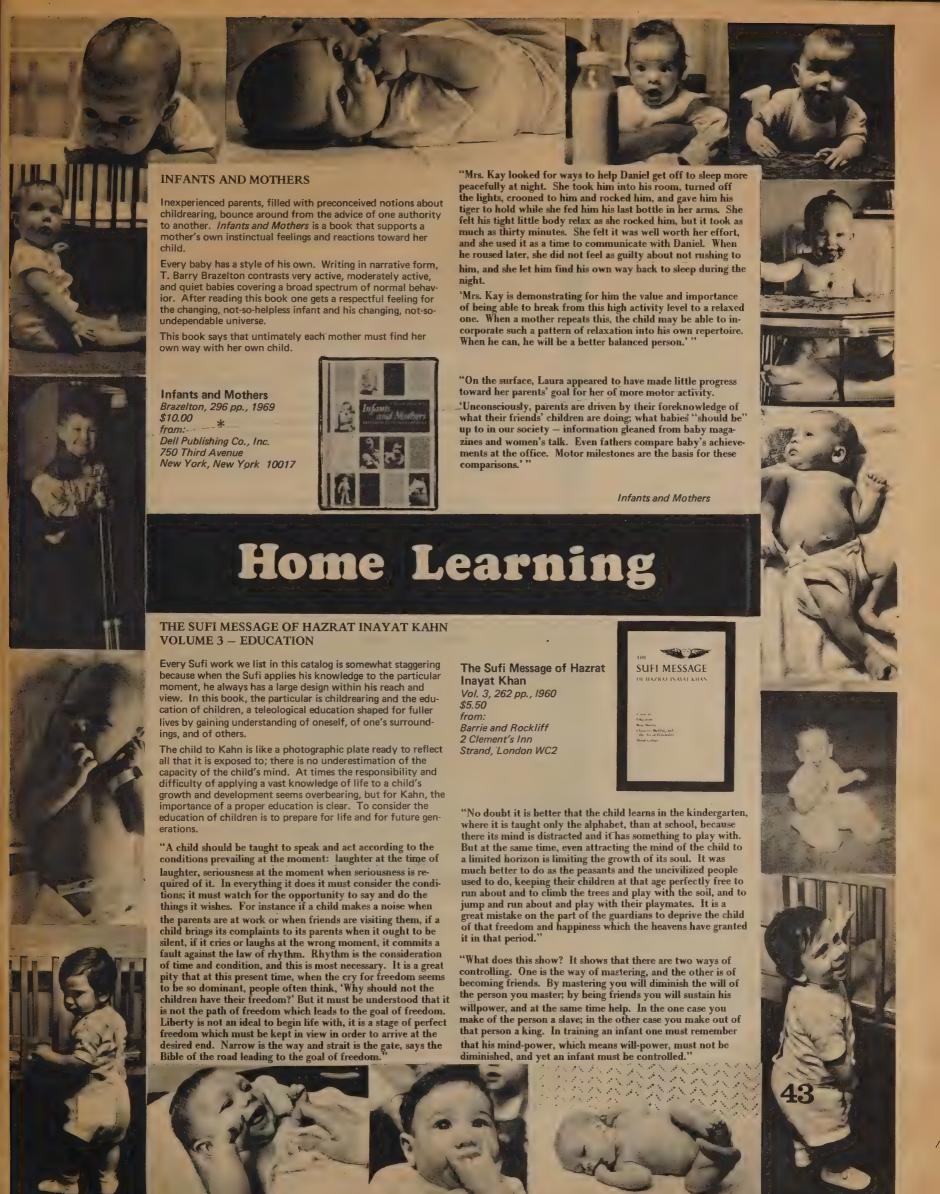
Jack: 'I hate my father! I hate my brother!'

Therapist: 'You hate your father. You hate your brother.'"

Play Therapy



Play Therapy
Virginia Axline, 374 pp., 1969
\$1.25
from:
Ballantine Books
101 Fifth Avenue
New York, New York 10003



We originally decided to review <u>How To Raise a Brighter Child</u> because a friend told us it had helped her realize that many times when she thought her son was being naughty, he was really just exploring and learning about his environment. Our reviewer suggested we also include Holt's <u>How Children Learn</u>. They seem to be a good 1, 2 punch together and perhaps should be read simultaneously.— The editors.

HOW TO RAISE A BRIGHTER CHILD

HOW CHILDREN LEARN

If you can get past the rather objectionable title, *How to Raise a Brighter Child* can offer many valuable suggestions to the concerned parent on how to provide an enriched, stimulating environment for his preschooler. Beck contends that "if you fill your child's life full of stimulation all of his early years, if you make your home what scientists call an enriched, 'culturally-abundant environment,' if you use early-learning techniques we now know, you can do much to raise your youngster's intelligence (as it is currently measured). In such a home, a child who would have grown up to be 'average,' will almost certainly become an 'above-average' individual. And a youngster who would have been 'above-average' in normal circumstances will probably grow up to be 'bright' or 'gifted'."

Perhaps I would have liked this book better had I not read, at about the same time, John Holt's beautifully written and sensitive book, How Children Learn. By comparison with Holt's writing, there is no magic, and very little joy, in Beck's presentation. But then, the stated purpose of the book is not to remind us how wondrous children are when they learn, but to provide guidance to the parent in a vital role, which is "to mold (his) youngster's intelligence when it is most subject to change, to teach him individually, at his own rate and when and by what means he is most likely to learn." In providing this guidance, she does succeed fairly well.

Holt's book left me with a marvelous feeling of relief, a "thank goodness, I don't have to teach my daughter anything, she will do it all by herself. All I have to do is not get in her way."

(Not always such a simple task, by the way, as anyone knows who has ever said "No, no, don't touch" unthinkingly and gratuitously to a child. But Beck's book left me with a nervous feeling of not doing enough for my child, made me frantically run through every aspect of her environment in my mind, to see where it could all be improved. Objectively, using Beck's suggestions to effect desirable changes is not in itself a bad thing, and I would recommend this book on the basis of its practical, often creative, ideas alone. But do not let yourself take it too seriously, lest you allow the joy of watching your child learn elude you. The book has a dogged quality to it, rather like a manual on growing African violets. Its message almost seems to be, "If you lavish enough stimulating experiences on your child's brain, in just the proper combination, he will turn out to be a perfect mental specimen."

Beck makes much of the necessity to point out concepts step by step to a child, to verbalize them, in contrast to Holt's contention that children need much time to "mess about", to "evolve their own learning along paths of their choosing", before we articulate concepts for them.

In her long chapter entitled "Should You Teach Your Preschooler to Read?", the author places rather more emphasis than I would like on the desirability of actively teaching a child to read, by one of many recently tested methods (such as the talking typewriter), several years prior to the six-year-old norm, in contrast to Holt's more gentle (and passive) allowing the child to learn to read when he wants to learn, for the sheer joy of learning, because he is too curious to wait for school. Not that Beck advocates pressuring a child to read; she does not. "... don't try to teach your preschooler to read unless you really want to, unless both of you will enjoy the process. Don't pressure him to learn so much every day. Don't drag him away from any other fascinating occupation to read. And don't attach any penalties to his not learning if he isn't in the mood. Stop the minute he acts the least bit bored or restless—or before, if you can manage it." Yet here, as elsewhere throughout the book, there is a real, if subtle, difference between her attitude and Holt's. She does not seem to be able to remove herself from the idea that a child must be taught, whereas Holt would allow the child the privilege of taking the responsibility for his own learning.

Interestingly enough, some of Beck's suggestions in the chapter on reading exactly parallel Holt's in his section on reading, for example, the idea of labeling, with clearly-printed signs, common household objects so that a child becomes accustomed to associating the written word with the object. But Beck merely presents the suggestion, which could so easily be exaggerated by overzealous parents, while Holt goes into a lengthy and subtle discussion of his particular experience, with one little boy, of placing signs about the house, then explores the importance of proper timing and presentation, and adds his observation that "... if we begin by helping children feel that writing and reading are ways of talking to and reaching other people, we will not have to bribe and bully them into acquiring the skills; they will want them for what they can do with them." That's what it is all about, after all, reaching others, not "acquiring skills" for their own sake. Despite a chapter on encouraging your child to be creative, and another at the end listing all the advantages a bright child has over others, I had the uneasy feeling that Beck is not really certain why she

PLAY, DREAMS AND IMITATION IN CHILDHOOD

Piaget has many books, hundreds of papers, most in French. He has profoundly influenced American developmental and cognitive psychology in the past 10 - 15 years, belatedly. This is not his easiest book. I pick it because I wanted to speak of Piaget as being useful — even crucial — to teachers, not of Piaget as a vehicle for professional psychologists, although this latter benefit is very true.

Play, Dreams and Imitation in Childhood traces the growth of these functions from infancy. Piaget finds two main mental functions operating, two main bases for what he terms all intellectual development: our ability to assimilate the world to our existing mental constructions; and our ability (or more often, necessity) to accommodate our mental structures to "reality". These two functions are usually in equilibrium. The child's pattern of development is, in essence, the pattern of the working of these two functions, from the "primitive" sensory-motor structures of the infant through the exquisite logical skills of the growing adolescent. This we know a great deal about; this the public schools have, to some degree, mastered; this is at the heart of most current curriculum reforms underway, especially those growing out of Jerome Bruner's work at Harvard.

But play, dreams, and imitation have been slighted in our culture, in our families, and especially in our schools. It is for this reason that I believe Piaget's book on these processes is so important. These are the processes that integrate the loose ends, that replace sanity during times of most rapid growth, that <u>allow</u> the most flexible and rich change, and, in the case of "imitation" are the most potent learning processes available to the human. Perhaps they have been neglected because their very depth and potency are scary to the more logical structures of the adult, or to the control function of the prison-like institution.

At any rate, Piaget shows how play and dreams are those processes which are <u>not</u> in a fine equilibrium with the existing mental structures of the child; how they mold reality almost totally to the world of the child — and thus we can see, through those few moments of pure play allowed the modern child, the real environment of his mind, and the child has an operation which integrates the world with him, with his needs. And, with imitation, we have the opposite: the child virtually abandons his own mental structures to take on an external reality, to "imitate".

As teachers become more aware of the possibilities of emotional integration in schools, and of the use of apprenticeship approaches as skill-learning devices, they will find a base for such work in this book that exists nowhere else.

For those wishing to get into the entire range of Piaget's work, the best guide I know is the first comprehensive summary and analysis of Piaget by John Flavell called *The Developmental Psychology of Jean Piaget*, with a foreword by Piaget himself. The book covers the history of Piaget's work, his approach, his major conclusions, "maps" of his stages of development, extremely detailed accounts of the timing at which children become capable of certain mental functioning (the ability to perceive space, objects, to attain mathematical concepts, natural phenomena, etc.)

It would be good if our cultural myths — our natural balance — allowed us to teach, to be with children, as artists rather than thinkers. But it's not spring in Western Civilization, we live in a contrived, constructed, manipulated world, amidst a sea of logical constructions and words, words, words. The child is deeply into this by the age of two, and irreversably involved with it by, say, five. To ignore this is to naively and cruelly abandon the child to a bad place. To reinforce what we are now learning is reductive and limiting, and equally abandoning the child's potential. But to understand the means by which children grow to make Western-sense of their world is to be able to evolve towards modes not imprisoned by logic. This is where I think we need Piaget.

PLAY.
DREAMS
AND
IMITATION
AN
CHILDHOOD

(Suggested and Reviewed by Robert Greenway)

Play, Dreams and Imitation in Childhood Jean Piaget, 296 pp., 1962 \$2.25 from: W. W. Norton & Company 55 Fifth Avenue New York, New York 10003

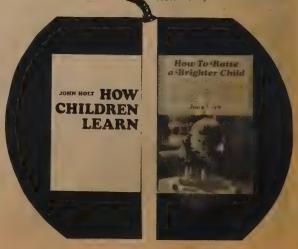
wrote her book, why it is <u>good</u> to have a "brighter child". Still, the book is helpful for the specific suggestions it has to offer. Some examples:

"Variations of the 'silence game' used in Montessori schools can delight two and one-half and three-year-olds and provide them excellent training in auditory perception. You play it, basically, by encouraging your child to remain just as quiet as he possibly can — for the purpose of hearing and identifying a sound. Perhaps it's a train or a plane or a siren in the distance, or water swishing through the dishwasher, or a key turning in a lock, or pudding just starting to bubble in a pot, or a bird outside the window."

"... play 'How many ways could you use a pencil?' with your youngster. Take turns thinking up as many different, nonwriting uses as you can, for example, a mast for a toy boat or a perch for a birdhouse. Then substitute other common objects for the pencil, such as an empty milk carton, a paper cup, a spool, or an old tire. Be encouraging and happy about his responses — not critical."

"Put a dozen simple objects in a paper bag, with the top tied just tightly enough to let your youngster slip his hand in. He is to identify each object by touch before taking it out." How Children Learn
John Holt, 192 pp., 1969
\$2.25
from:
Pitman Publishing Corporation
20 East 46th Street
New York, New York 10017

How to Raise
a Brighter Child
Joan Beck, 273 pp., 1967
\$5.95
*
from:
Trident Press
630 Fifth Avenue
New York, New York 10020



PUT YOUR MOTHER ON THE CEILING

A mind-exercise book. The pattern of imagination games is one path to the power we have to transform the impossible to the actual. The realms not reserved to the constitution of the real (what has existed up to this moment) such as accuracy, conformity, and obedience are the infinite areas of personal discovery — wonder, fantasy, and mistakes. The games are mental "simon says", where the players are led from recollection through the situation of the moment, through the most impossible improvisations on that theme, to a final release and return to the inauguration of the notime of imaginations's exploration.

Each idea is a mind-breath. It sinks in, we immerse ourselves in it, and emerge to find the new idea embedded in the totality of our experience. The games will probably shake up the adult more than the child. I wandered from the paths of the actual reading these games to an imaginary audience. Seeking not only the horizons of hope, we dance and dwell in the field.

If you have bad manners, you may eat like a pig, but you can't really be a pig. You can't know how a pig feels. The best way to imagine how a pig feels is to imagine that you are a pig. You can say, "now I am a pig." There is nothing you can't be, in your imagination.

Would you like to be some things?/All right, this game is called BEING THINGS.

Be a bird./ Be a dog./ Be a pig./ Be an eagle./ Be a duck./ Be a tiger./ Be a lizard./ Be a shark./ Be a giraffe./ Be a chicken./ Be a mosquito./ Be a trantula./ Be a rattlesnake./ Be an octopus./ Be a whale./ Be a goldfish in a bowl./ Be a cat./ Be a horse./ Be an ant./ Be a bee./ Be a butterfly./ Be a black widow spider./ Be a tree./ Be a squirrel./ Be a rabbit./ Be a wolf./ Be a hawk./ Be a pelican./

What is the most awful thing that you can think of?/ All right, he that./ Now be the nicest thing you can think of./ Be something else./ Be something else./ Something else./

Be Mother./ Be yourself./ Be Father./ Be yourself./ Be Brother./ Be yourself./ Be Sister./ Be yourself./ Be Uncle./ Be yourself./ Be Aunt./ Be yourself./ Be a doctor./ Be yourself./ Be a nurse./ Be yourself./ Be a policeman./ Be yourself./ Be someone else./ Be yourself.

Be something no one has ever been before./ What is it?
Be nothing./ Be something./ Be nothing./
What would you like to be now?/ All right. What is this game called?

(Reviewed by Jon Friedman)



Put Your Mother
on the Ceiling
de Mille, 175 pp., 1967
\$3.95
from:
Walker & Company
720 Fifth Avenue
New York, New York 10019

Early childhood development is a very big area in education these days. Researchers are discovering some very exciting things about the cognitive development that takes place during the first years of life; and those discoveries have important implications both for parents and for the society as a whole. This subject is important enough to deserve fuller treatment than we're able to give it at this time, but we'll cover it in more depth in the next catalog. We're hoping for lots of feedback from our readers on this subject, so please let us know what you think is good or awful and why.

PRESERVED AND THE PROPERTY OF THE PROPERTY OF



REVOLUTION IN LEARNING

The main virture of this book is that it provides a quick overview of what's happening in early childhood education in the United States. The author describes her book as "a passionate report on the discovery that we can produce more intelligent as well as happier human beings by stimulating children to learn more during their earliest years." Actually, she concentrates more on the projects based on this discovery than on the actual research in early learning. The book surveys a wide variety of projects but doesn't really deal with any subject in depth.

Mrs. Pines is not an impartial commentator. She is thoroughly sold on the value of early learning, and at times the book takes on an almost evangelical tone. She seems equally enthusiastic over Bereiter and Engelmann's "pressure-cooker" approach and O.K. Moore's "talking typewriter", even though the two approaches are based on radically different attitudes and values.

Many early learning projects are aimed at the children of the poor and racial minorities; Mrs. Pines seems to believe that improving those children's IQ scores will solve their problems. She completely ignores the fact that slum kids get lousy schools and blames the kids' failure on lack or early stimulation.

I have other objections to the book; however, it's still worth reading because it's always useful to keep in touch with what the educational Establishment is up to.

"A fierce, though largely undeclared war has been raging since the early 1960's between [the early-childhood] Establishment, which is concerned primarily with children's emotional and social development, and the innovators, who emphasize cognitive, or intellectual, growth."

"According to the cognitive psychologists, an individual's achievement in life depends very largely on what he has been helped to learn before the age of four. . . . The child's intelligence grows as much during his first four years of life as it will grow in the next thirteen, they point out. At two or three years of age, he can learn any language, perhaps even several languages, more easily than any adult. During this period of extra-rapid growth, the environment exerts its most powerful effect."



EARLY CHILDHOOD EDUCATION STUDY

This group offers papers, articles, and films with better information and far less money than most books about early child-hood education. *Approximation No. 1* is a cost-break-down plan for setting Head Start Classrooms with emphasis on equipment that can be easily constructed at a minimum cost. The *Occasional Papers* are original articles, reprints, and bibliographies of general interest to teachers and parents. They included *Leicestershire Revisited* by Bill Hull, *Messing about in Science* by David Hawkins, and excerpts from the *Plowden Report*. These items cost \$1.00.

ECES also makes films available on loan for a 6 to 10 dollar rental fee. The films are concerned with the workshop process in the classroom. The "Vignettes" offer close-range continuous films of children doing things from washing walls to playing marbles.

The availability of the *ECES* materials always seems to be changing. It is best to send for their free catalog before ordering.

Early Childhood Education Study Education Development Center 55 Chapel Street Newton, Massachusetts 02160



Revolution in Learning
Maya Pines, 244 pp., 1967
\$5.95 *
from:
Harper & Row, Publishers, Inc.
49 East 33rd Street
New York, New York 10016

"Hunt believes that future generations of human beings can become far more intelligent — gaining an average of perhaps 30 IQ points — through better management of young children's encounters with their environment. The crucial problem is what he calls 'the problem of the match' — finding the most stimulating circumstances for each child at each point in his development. Given anything too incongruous, children will withdraw, or ignore it; anything too familiar, and they will have no need to modify existing patterns of thought. The trick is to find circumstances with 'an optimum of incongruity' — just a little beyond what the child has already stored in his brain."

"We can hook babies on learning, developing a life-long need for it. We can feed the toddler's drive to explore, allowing a variety of talents and interests to flourish. Through different kinds of responsive environments, we can let each child take the initiative in interesting dialogues that will lead him forward along the road of his choice. In well-baby clinics and pediatricians' offices, we can provide regular check-ups on intellectual development for every young child. By means of Children's Houses on every block, where mothers can leave the young for half an hour or a full day, and a network of home tutors, we can prevent the intellectual crippling of millions of youngsters."

"... Omar Khayyam Moore, the University of Pittsburgh professor who invented the talking typewriter on which children as young as three and four have learned to read, write, and compose poetry, firmly believes in the low-pressure way. He also wishes that people would pay less attention to the 'hardware' and more to his responsive environments method.

"This method consists of letting the child teach himself skills in his own way, without adult interference. In principle, at least, the child always takes the initiative, The environment — both man and machine — simply responds in certain ways, depending on what the child has done. This means that no two programs are alike — each child faces puzzles that are programmed just for him, and that keep changing as he goes along. He never needs to please an adult, or to achieve anything. . . . "

"... During World War II, when it became not only acceptable but positively patriotic for mothers to work, enough nurseries and day-care centers suddenly blossomed, with government aid, to accommodate about 1,600,000 children. Today, when the number of working women exceeds the wartime total by 6 million, day-care centers have shrunk to one-sixth their wartime capacity."

NOUMEDIA TAPES

Noumedia has assembled a tape recorded library of speakers worth listening to. The tapes are all on the subject of human growth and include talks by Baba Ram Dass, Claudio Naranjo, William Shutz, Alexander Lowen, and Fritz Perls.

George Fisher is trying to run this company in the same spirit as the recorded subject manner, making special arrangements for those who can't afford the rental fee, and committing some of his profits to the Bucks County Fellowship Fund.

Catalog free from: Noumedia Co. P.O. Box 750 Port Chester, New York 10573



HATHA YOGA

I first read this book shortly after its publication in 1950, and since then I have used my copy as a reference frequently. It has an excellent set of photographs of yoga asanas, each one with its Sanskrit name and usually an English equivalent. Theos Bernard became a practising disciple rather than an aca demic bystander doing research on yoga. However, this book is rather academic in tone, with its copious quotations, footnotes, and strict adherence to Sanskrit terms. Although it is an account of his personal experiences, it has few anecdotes and does not describe any of the personalities he worked with It is rather "cold" and does not make light, easy reading. How ever, for the serious student, it is a very useful source. So much for its format and style.

In India, after travels to Tibet as well, he "adhered to the rigid discipline imposed on one who wishes to practise hatha yoga. The author remains very neutral about the value of yoga:

"Any attempt to prove the merits of the 'art of Yoga' would be futile. If a thousand volumes were quoted in its favour and all the rules of logic and sophistry were employed, the doubts and scepticism of modern man would still remain. Therefore this study is not an attempt to prove the merits of Yoga or to explain its results. Instead, I here present a report of my personal experiences in learning and prestiging the basic sonal experiences in learning and practising the basic techniques of Hatha Yoga, in order to give the Western reader an accurate account of the conduct of a typical oriental course in that Yoga.'

The author states that hatha yoga is the uniting of the two breaths in the left and right nostrils. This very literal and physical definition has profound and practical significance.

"Hatha Yoga is a discipline involving various bodily and mental controls, but central to them all is the reg-ulation of the breath. Hatha is derived from two roots, 'ha' (sun) and 'tha' (moon), which symbolically refer to the flowing of breath in the right nostril, called the 'sun breath', and the flowing of breath in the left nos-tril, called the 'moon breath'. Yoga is derived from the root 'yuj' (to join); therefore, Hatha Yoga is the uniting of these two breaths. The effect is believed to induce a mental condition called samadhi. This is not an imaginary or mythical state, though it is explained by myths, but is an actual condition that can be subjectively experienced and objectively observed.



Thus yoga signifies integration or samadhi (from sam+a+dha to put together as one whole). It is interesting to note parallels with Gestalt Therapy, Psychosynthesis, and other modern human "growth techniques", in this basic aim.

The first chapter is entitled "Asanas", or bodily postures. "There is not a single asana that is not intended directly or indirectly to quiet the mind." This stresses the integrative approach of yoga — a sound mind in a healthy body. Some of the postures help to give a balanced outlook on life, by practising physical balance, for example in the tree posture, shown in XXX. This exercise should be done with closed eyes, once you can do it easily with open eyes.

The purpose of hatha yoga is to gain control of the breath, but this is not possible until the body is thoroughly purified. Some of these purification practices seem "far-out", like pull ing out the large intestines and washing them, or drinking a large quantity of water and then vomiting it out voluntarily. Or, the author assures us that in about three weeks one can learn cleaning by cloth, by swallowing 22 feet of it, and then pulling it up after 20 minutes. A word of caution though, "always leave a few feet of cloth unswallowed." These "far-out" purification processes demonstrate that in hatha yoga the maxim "cleanliness is next to godliness" is taken quite literally. The chapter on pranayama (breathing exercises) describes alternate nostril breathing, and suspension of breathing for minutes at a time. The purpose of pranayama is to gain control of the at a time. The purpose of pranayama is to gain control of the mind, and to stop its incessant activity. Stopping the mind's activity is something very foreign to our Western culture — we are taught to always be so proud of our mental productions. But, we may recall the tales of the serpent of knowledge and original sin in the story of Adam and Eve in the Bible.

"Samādhi cannot be experienced until a condition of mindlessness has been created. All modifications of the thinking principle must cease; all thought forms must be removed, yet some form of awareness must remain. Without Yoga experience it is difficult to imagine what

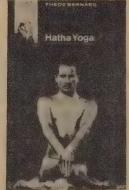
Without Yoga experience it is difficult to imagine what is meant; that is why teachers do not even try to explain. Therefore, I, too, pass by the theory of samādhi and describe the more practical aspects of Yoga."

The footnotes quoting the classic texts abound with florid language describing powers to be obtained, diseases that are conquered, and details of bodily parts. We should remember that this is technical language in a specialized discipline, and in many cases in not to be understood the way we usually understand such language.

This book is a valuable work. I would have preferred a more intimate feeling with the author, but he remains very distant from the reader. It is tragic that Theos Bernard was killed at a young age, in the Himalayas by some bandits. This tragedy occurred only a few years after he wrote this book. It is clear that he made considerable progress in the study of yoga, and would have, by this time, been a very significant interpreter of yoga for the West. If, in addition, he could have promoted its true practise in the East, this would have been even more sig-

(Reviewed by David J. Hall)





Hatha Yoga Bernard, 104 pp., 1968 \$3.00 from: Rider and Company 178-202 Great Portland St. London W1



NUTRITION AND CONSCIOUSNESS

Have you noticed that people filing through supermarket aisles everywhere look like the denatured products in their carts? Fruits and vegetables are grown in depleted soil and then sprayed, gassed, waxed or worse. An increasing num-ber of products contain chemical additives and preservatives. Flour and sugar are refined, sugar so much so that it is more accurate to refer to it as a chemical than a food. Animals whose flesh and insides we feed upon have also received unwholesome nourishment and are often shot full of hormones. The long list of "atrocities" is now becoming public know-ledge. As if things weren't bad enough, we then overcook our food, destroying much of the vitamin and mineral content; eat too much; don't chew enough. We are learning from overcrowded hospitals that the famous "American Standard of Living" must be examined more closely.

What should we do about all this? The readings which follow suggest one solution to the problem which I have found to be extraordinarily successful — and delicious. Larson and Bircher-Benner tell us to develop a dietary program composed largely of raw, organically grown fruits and vege tables. Eat lots of fresh salads, fruit plates, nuts, seeds, some lightly steamed vegetables, grains now and then, yo-gurt, natural bland cheese, honey as the main sweetener, six to eight glasses of spring water a day; and very little

meat, fish, eggs and milk. The Larson booklet is the most practical and reliable introduction to the principles of natural foods nutrition that I know of. These principles are presented in a clear and concrete manner in only twentyfive pages. The Bircher-Benner works, also of immense value, explicate the same basic principles but in a more detailed and slightly more technical way.

A review of books about nutrition appears in this publication because any general educational approach which does not integrate knowledge of the selection and preparation of food with the rest of what is taught is a farce. People know more about their hi-fi sets and automobiles than the care of their bodies. This must be corrected. There is no choice. To use a cliche, education must be concerned with the whole person. Students must learn to take responsibility for their own health — not simply to prevent illness but to experience the ancient truth that a proper program of nutrition can help shape consciousness into a more subtle instrument capable of grasping more subtle truths. Nutrition really is that powerful, but you have to start eating properly to find out.

(Reviewed by Larry Rosenberg)

Eating Your Way to Health Ruth Bircher, 1961 \$2.50 from: Faber and Faber London

Fruit Dishes and Raw Vegetables Bircher-Benner & Bircher, 1968 \$1.00 from: C.W. Daniel Co. Essex, England

Fundamentals in Foods Gena Larson \$1.00 from The International Association of Cancer Victims and Friends, 5525 El Cajon Blvd. San Diego, California 92115

Children's Diet M. Bircher-Benner, 1964 \$2.00 from C.W. Daniel Co. Essex, England



LOVE AND ORGASM

Essentially this book says that anyone who thinks that the mind can be separated from the body (or vice versa) has his head up his ass

Lowen is a student of Reich who took Reich's infamous theories and molded them into workable therapeutic techniques. Reich said (in Character Analysis) that man builds "character armor" around himself. This character armor is a manifestation in a person's physical body of the neurotic defenses in his psyche. Neurotic disturbance is only one of the fronts in the battle between ego, id and superego — the battle is also fought in the body. The conflict in the psyche which is paranoia, schizophrenia, or simple confusion, in the body becomes tense muscles, tight joints, chronic illness, premature ejaculation or frigidity. These tensions or character armoring interfere with a healthy sexual life. Reich also said that a person isn't completely healthy unless he or she can experience a full and natural orgasm.

"According to Reich, the orgastically potent individual does not suffer from a neurosis. The reasoning behind this conclusion is that the orgasm, if it is full and complete, discharges all the excess energy of the organism; thus there is no energy left to maintain the neurotic conflict or the neurotic repression... One school of thought then held and still holds that every climax is an orgasm. However, Reich restricted the meaning of the term "or-gasm" to total release and fulfillment." (p.188-9)

Lowen bases his therapeutic process on Reich's doctrine that classic psychoanalysis, in freeing up the mind, does not apply itself to the rigid character structure of the body, thus allowing for the recurrence of the psychic disturbance through remaining body tensions. For just as psychic conflict causes body tension, the reverse also applies. Using this given, Lowen reads the body as an important part of the analysis, and then mixes psychoanalysis with body movement, massage, relaxa-tion and bioenergetic "releasing" exercises in the therapy.

"The ideal of manly posture has been and is the West Point carriage: belly in, chest out, shoulders squared. But if such posture is called for in soldiers, it makes no sense in terms of sexuality. It is a posture that denotes control, restraint, order, and, perhaps, command. It emphasizes the ego values, but it inhibits the surrender to the unconscious and to the feelings necessary for orgastic discharge. It reduces the body to an instru-ment of the will, and it decreases orgastic potency. The contraction of the belly prevents feeling from invading the pelvis. It cuts off the genital organ from the rest of the body and transforms it into a tool. The tight buttocks further limit sexual feeling. They give the pelvic thrust a sadistic quality by making the movements hard and driving. The penis is transformed into a weapon. This posture can claim to be masculine only in that it denies the feminine side of man's nature. The soft "full-bodied" sexual feelings are regarded by the ego as aspects of the feminine." (p.312-3)

Love and Orgasm outlines some of Lowen's techniques for analysis and therapy. At times the book becomes heavily psychologistic and often the actual therapy is rather brutal and ms to lack heart. This book, however, is a joyful book in that it shows us a way out of our body up-tightness and pre-sents a model of kinesthetic relaxation which allows for the free-flowing of energy and emotion. The book is important to me in my growth. It helps remind me of some of the beautiful potentials of love-making which I don't always discover in my own ego-involved, awkward experimentation.



Love and Orgasm 1301 Avenue of the Amer

New York, New York 10019

The preceding chapter dealt with the psychological concomitants of orgasm. I emphasized that the orgastic experience is perceived as a sensation of physical satisfaction based upon the total commitment of the self to the sexual action. The physical reaction that is the basis for this feeling of satisfaction is the participation of the total body in the involuntary pleasurable movements of sexual discharge. This emphasis upon the total body distinguishes heterosexuality from homosexuality and the kind of climax that is limited to the genitals from the climax that Wilhelm Reich described as orgasm.

While this distinction is valid and important, it is, nevertheless, incomplete. Since every sexual climax has some elements of the orgastic experience, it would be more correct to speak of partial and full orgasms. A partial orgasm is by its nature limited and unfulfilling and is not experienced as physically satisfying. It is, however, a form of sexual release, and temporarily, at least, it abates the sexual tension of the organism. For women who have never experienced any form of climax in the sexual act, the partial orgasm is often a rewarding and revealing experience.

"Man is reborn 99 through orgasm.

... In the absence of a sexual disturbance, the excitement of fore-pleasure naturally leads to the desire for the closest possible physical contact between the two individuals. This can be achieved only by the normal act of penile penetration of the vagina. In the course of penetration, the sensory pleasure of contact increases sharply until penetration is full and complete. Soon after this is accomplished, there is a leveling off of the excitatory state — love has achieved its first objective; the two are as close together as possible. . . .

This feeling of relaxation, as after a journey ended, is only an interlude. It is followed by an increasing urgency, to bring the experi-Inde. It is followed by an increasing urgency, to bring the experi-ence to a climax. The situation calls forth the specific sexual move-ments that will give rise to new sensations and stronger impulses. To the experience of sensory pleasure is added the new experience of kinesthetic pleasure derived from the sexual movements.

During the first phase of coitus, the sexual movements are under During the first phase of coitus, the sexual movements are under ego control and are completely voluntary. At the beginning, they are slow, gentle, and relaxed. Generally, the movements of the man dominate during this period, but this may change if the woman assumes the more active role. The position and rhythm that the partners adopt should be whatever suits their individual needs and mood at the time. I shall proceed on the assumption that the man is on top of the woman and takes the more active role. In this case, the woman tends to be passive until a rhythmic pattern is established by woman tends to be passive until a rhythmic pattern is established by the man with which she can harmonize her movements. Before this happens, however, the man may interrupt his movements either for a short period of rest or for an adjustment of position. Interruption at this time does not interfere with the course of the excitation, which tends to remain at a fairly steady level. But interruptions of the sexual act can diminish the final pleasure if they interfere with the establishment of a rhythmic pattern of movement.

The voluntary movements serve to unify the body so that the rhythm of breathing and pelvic thrust are synchronized. If there rhythm of breathing and pelvic thrust are synchronized. If there are no inhibitions, the forward thrust of the pelvis coincides with the exhalation of the breath. In the course of the voluntary movements, the man attempts to "ground" his body by making the forward movement of the pelvis with his legs while digging his feet into the bed. The shift of emphasis to the lower half of the body prepares the way for involuntary pelvic movements. During the voluntary phase, the consciousness of both parties is directed toward the perception of pleasure in the genital areas and to the quality of the

Before a definite rhythm can be established and maintained, the Before a definite rhythm can be established and maintained, the movement of the pelvis must become full and free. Pushing the pelvis rather than swinging the pelvis will prevent the involuntary movements from occurring. The kinesthetic pleasure of sexuality depends on the quality of the pelvic movement. Civilized human beings are ordinarily restricted in their body movements. Compared with primitive people, their hips are more bound and their pelvic musculature is more tense. This restraint of pelvic motility must be overcome if the act of coitus is to be fully satisfactory. The pelvis should move with the smoothness of a well-oiled hinge but not independently, like the free swing of a dangling leg. In the man, the impulse of the like the free swing of a dangling leg. In the man, the impulse of the movement comes from the legs and is fully ego controlled. While the man is "grounded" through his legs, the woman in the supine position is "grounded" on the man through the contact between her legs and his body. This allows her movements to become synchro-

The phase of voluntary movement ends when a definite rhythm has become established that harmonizes the movements of both partners. This phase occupies the longest time period of the sexual act. Its function is to involve as much as possible of the body in the sexual movements. It prepares the way for the transfer of control over movement from the head to the pelvis. It smoothes the transition from ego function to id function. This phase should end when these objectives have been reached. It terminates earlier in a premature ejaculation because of the inability to sustain the mounting tension.

At this point, the tempo of the sexual movements increases. It is accompanied by the desire on the part of the man and woman for deeper penetration and greater friction. It begins as a voluntary action by the male initiated when he feels that he is ready for the as-Love and Orgasm

Lowen, 319 pp., 1965

\$0.95

from:

Signet Books

The New American Library, Inc.

1301 A years of the Americas

The American Library is a specific and the second of the American Library is a specific and the second of the American Library is a specific and the second of the American Library is a specific and the second of the American Library is a specific and the second of the American Library is a specific and the second of the American Library is a specific and the second of the American Library is a specific and the second of the secon

... The orgam is experienced as the opening of a dam, with the re-lease downward of a flood of feeling while the body convulses as a unit in response to each involuntary forward swing of the pelvis. Feelings of melting and streaming downward now pervade the whole body. If the acme is intense enough, the sensation of heat increases and is perceived as a glow in the pelvis and as an overall body sensa-tion of lumination. When eigenlation begins in the man, his avoite. tion of lumination. When ejaculation begins in the man, his excitement mounts and remains at a high peak for a few moments. During this phase the orgasm may be experienced as "flying," "spinning," or some similar sensation. The orgastic experience of the woman parallels that of the man in every respect except for the sensations of

At the acme, there tends to occur a loss of ego consciousn This is a temporary eclipse of the ego and is not to be confused with a feeling of abandonment. One doesn't become unconscious in the a feeling of abandonment. One doesn't become unconscious in the process of orgasm. It would be more correct to say that the individual tends to lose consciousness of the self. The self disappears the fusion with the love object: love has achieved its final goal. There is not only a feeling of complete unity and merger with the partner, but also a feeling of being part of the total pulsating universe. This latter feeling supports Reich's idea that in orgasm, man finds his identification with cosmic processes.

THE "SUPREME ULTIMATE" EXERCISE FOR HEALTH, SPORT AND SELF-DEFENSE



T'ai-Chi Cheng & Smith, 112 pp., 1969 from: Charles E. Tuttle Co., Inc. Rutland, Vermont

Walk like a cat and mobilize your energy as if pulling silken threads from a cocoon

T'ai-Chi Chuan is an ancient Chinese discipline, Taoist not Confucian in origin, dating from perhaps as early as 700 AD, with definite roots in Chinese medicine. It has since proliferated into numerous schools and methods, each with its own claim of authenticity and authority. I studied awhile with this book's author ("Professor Cheng" to his students) due to his calm and satisfied face, as seen in a photograph.

Mind (i) and intrinsic energy (ch'i) are complementary bases of T'ai-chi.

One begins by learning the Solo Exercise: thirty-seven postures, connected by precise transitional movements, performed always in the same slow exact order. Very pleasant to watch, though inner correctness not outer appearance is the goal.

It is not a dance.

This exercise represents not only accumulated Chinese know-ledge of health through exercise, but a series of fighting positions as well. Every aspect and stage of T'ai-chi has this dual quality.

Hookups (only partially disclosed) with I CHING, Chinese herbalism and acupuncture, calligraphy, TAO TE CHING . . . only with long T'ai-ch experience can these things be revealed/grokked . . .

The Solo Exercise is practiced with the body relaxed or "sung" like a ball of cotton: soft, resilient, pliable — as if suspended by a string attached to the top of the head, relaxedly erect.

> If one pretends to swim while out of water, his movements automatically conform to the principles of T'ai-chi.

The spine is straight so the spirit breath or intrinsic energy (ch'i) can flow freely, hopefully down into the HARA near the navel, where mind emptied of thought is concentrated. The body becomes so heavy with relaxation that roots are felt to extend down through legs and feet into the earth. Thus rooted and supple, the adept is prepared to stand his ground while the opponent's attacking force slides past him.

Some masters have what we call receiving energy, with which one's body not only absorbs an enemy's strike, but also repels him at the same time. Some higher masters have this ability under subconscious control, so that they can be attacked from the rear and the enemy repelled ten feet by the force of his own attack, with the master hardly being aware of it.

TWO WARNINGS

- 1. Although Professor Cheng has included detailed instructions and photographs for the Solo Exercise in his book, it is virtually impossible to learn it without a teacher
- Any short-term attempt to learn T'ai-chi is probably a waste of time. You can learn the Solo Exercise in about four months, but without practice-with-partners (which comes later) you will have no test or control of your knowledge of the art.

When the opponent pushes against you, he feels as if there is no end to the emptiness he encounters. When he advances against you, he feels the distance incredibly long; when he retreats, he feels it exasperatingly short.

(Reviewed by Michael Hudson)

POSTURE 25 POSTURE 26 POSTURE 27



Self-Discovery



TOWARD A PSYCHOLOGY OF BEING

Abraham Maslow believed that a <u>psychology</u> — a rigorous scientific study of Man — could be big enough to do justice to the rich emotional life and most ineffable spiritual aspirations of human nature. So he redefined science, and founded, along with Rollo May, Erich Fromm, Carl Rogers and many others, a new "Third Force" psychology that would:

- not reduce Man to an objective entity
- not categorize ("rubricize") man as an aspect of something else
- accept Man as good or at least neutral rather than intrinsically evil
- explore the good things, the healthy things, the growth processes in man rather than his sickness
- take Man in his totality, and in evolutionary perspective.

This little book is the summary of this approach to man, if not a <u>magnum opus</u> at least a comprehensive and concentrated view of Maslow's fundamental insights and life work, written as the Bhagavad-Gita might sound if its authors had grown to intellectual maturity during the 1930's and into full professional stature during the 1940's and 1950's.

As such this can be a handbook for understanding the flower/love side of the alternate-culture revolution sweeping the country in recent years.

As such it can define a whole realm of academic endeavor, a new, more human approach to the crazy field of psychology, as has in fact happened at Sonoma State College in California, and in a very few other places.

As such it can be a base for an entire academic approach, as did in fact happen at Franconia College between 1963-66.

As such his work can be an incredibly useful base — for those needing a base — for starting "free" alternatives to the repressive and self-demeaning public schools.

Third Force Psychology coalesced during the 1950's and became a vivid, public movement during the early 1960's. (Now it is already showing signs of a premature middle age.) The three "forces" of which humanistic psychology is one do not compare easily. The experimental psychologists have a strategy at the base of their work which requires that they only look at certain phenomena — usually observable and measurable behavior. The Freudians (the "second force") is open to all research strategies, but is built on the metaphysical assumptions that man is a fallen creature, imperfectable, doomed to animal-like aggression and modes of fulfillment. The third force differs with the behaviorists by accepting a wider range of behavior as a field of study — joy, ideas, feelings, love, hate, intangible aspirations — and differs with the Freudians in believing that man is inherently good or at least neutral, that he is perfectable, god-like, growing, and that his chief purpose in life is not to react to stimuli, not to adjust to a bad situation, but to grow and to create the necessary utopias in which we can all grow to our full potential of god-like wisdom and Dionysian joy.

Maslow saw Third Force Psychology as a transition. Growth — "self actualization" — is a process, not an end. It is for a people growing out of a destructive culture, a culture built on what hindsight now shows us are pathogenic, anti-survival principles. It is a vision groping for higher and higher spiritual syntheses, moving towards individual and then cultural enlightenment. "I should say also that I consider Humanistic, Third Force Psychology to be transitional, a preparation for a still 'higher' Fourth Psychology, transpersonal, transhuman, centered in the cosmos rather than in human needs and interest, going beyond humanness, identity, self-actualization, and the like." (From "Preface to the second edition.")

Abe died in early June. He was no poet, no scientific genius, no mystic like Norman O. Brown, yet he had heavy insights by the tail and he never let go.

Those of us who went to Brandeis to learn from him as graduate students often became obsessed with the contradictions in his life, missing the forest for some weird trees. We gave him so much crap, and he was so vulnerable!

Often his conviction that he had unique insights that could change man and society seemed too much like an arrogant, competitive self aggrandizement, a forced greatness in reaction to Freud or B.F. Skinner. His constant talk of growth made us look all the more penetratingly at his own shortcomings. He talked constantly of his "data" and, with one foot in experimental psychology which made up the rest of his department at Brandeis, we asked him how he could even consider his meager collection of information on "healthy" people as "data". We had come for love and the approval of wise, humanistic, self-actualized men. Instead we got the same kinds of rigid graduate-school busy-work demands common in the huge psychology factories at the state universities — and the challenge to join the demands of scientific exploration with the needs of human growth. So instead of becoming disciples, most of us laughed.

I am stunned now, while rereading this book, to realize just how much of Abe we did absorb, and how clouded our eyes were by our own needs. Abe's work is at the heart of the movements and changes sweeping us all. If he is, in a lovely sense, the bizarre product of one of the strangest communities ever to walk the earth — the professional psychologists, men steeped in the scientific method and defensive about it, with almost no philosophical or spiritual underpinning and defensive about it, groping to understand the mysteries of the human psyche — he was also, unquestionably, a man of knowledge in the fullest Yaqui Indian way (cf. *The Teachings of Don Juan* by Castaneda). If he was sure of himself to the point of apparent arrogance, consider what essence ideas he was dealing with:

- "evil comes from above rather than from below" (from the culture rather than from the intrinsic nature of man)
- people can change through an act of will from the domination of basic needs towards the fulfillment of spiritual and aesthetic needs
- every crime against our own <u>real</u> human nature makes us despise ourselves
- ungratified needs breed illness, distortion, a blocking of our true, human potential
- people seek, not homeostasis, but movement towards actualization, movement from basic needs to growth needs to full gratification ("... a new and higher need emerges when the lower need fulfills itself by being sufficiently gratified.")

So, belatedly, thank you, Abe. Your ideas, deceptively simple, give us a base for exploring and changing and creating utopian systems of education.

Children with unfulfilled basic needs will not grow into their human potential, though they may gain skills related to getting what they need. Schools must peel away the inhibitions and constraints preventing the child's <u>own</u> unique self to emerge ("... we rest here on the faith that if free choice is <u>really</u> free and if the chooser is not too sick or frightened to choose, he will choose wisely, in a healthy and growthward direction, more often than not..."). Then as the child grows, he becomes capable of a perception and insight based on "being-love" — on fulfillment rather than need — and thus he is able to integrate and synthesize with less abstraction, less judging, less interfering and intrusion. He can find his own pace of growth, and learn to protect his uniqueness while growing. He will fear knowledge less and less, develop courage for making the necessary jumps into "higher" orders of being and knowing. ("... we can explore best out of a safe harbor.")

It is a system based on love — love-cleared eyes to see it in the first place, strength borne of love to grow with it. Exciting that some heavy psychologists got into it — but much more than an academic curiosity: these thoughts are among the very best guides we now have to meet the dilemma of our chaotic and "need-based" culture.

Abraham Maslow, who died in June, 1970, has left us vastly more than even he ever suspected.

(Reviewed by Robert Greenway)



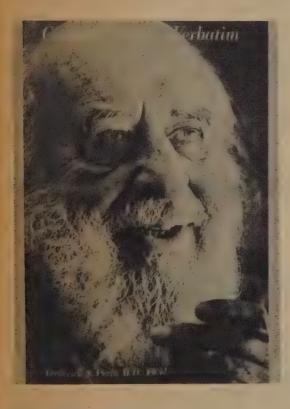
Toward a Psychology of Being Maslow, 240 pp., 1968 \$2.95 ** from: Van Nostrand Reinhold Co. 450 West 33rd Street New York, New York 10001

GESTALT THERAPY

GESTALT THERAPY VERBATIM

IN AND OUT THE GARBAGE PAIL

This trilogy of works penned by the dirty old father figure of Gestalt psychotherapy (and friends) can assist travel of myriad persuasions and idiosyncrasies on voyages into themselves and their universes if, and perhaps only if, they have begun to find themselves wearied and exhausted by asking, of themselves and others, the question: why? For "why" is a strange question, designed more, perhaps, to fill in holes in our heads than anything else, and answers to that question curiously enough have the property of somehow remaining unconnected to feeling, movement, and behavior, the "stuff" of life and existence. For the Gestaltist, Time is the Now; explanations of behavior in terms of historical (i.e., time as dimension) considerations is irrelevant for all but the psychological theoretician, and historicity is viewed, for the person interested in growth, movement and contact, as rationalization, as intellectual copout, as avoidance of consciousness and awareness. The question "why" is replaced by the question "how." The buck cannot be passed; we are utterly responsible for where and who we are. ence is Now. The attempt at escape — into resentments from the past or catastrophic prophecies for tomorrow is the heart of neurosis, of anxiety, and is the mechanism of repression of consciousness in the Now. There is no one to blame; we make ourselves into what we are and, within the therapeutic context, the Gestalt therapist will inexorably frustrate every attempt to escape the Now and How of your existence. Awareness, like a baby's first breath, need not be pleasant; by stretching time into the past and future we are obviously avoiding the momentousness of the present, and it is all too likely there is a hallucinated, but nonetheless real-feeling "reason" for this attempt at escape; returning home, to ourselves, can well generate pain as a precursor to the freedom and responsibility of Being.



Gestalt Therapy Verbatim Perls, 279 pp., 1969. \$5.00

from: Real People Press 939 Carol Lane Lafayette, California 94549

Topdog: Stop talking about Reich. Follow your intentions and stick to your theme, the oral resistances.

Underdog: Shut up. I told you a few times, this is my book, my confessions, my ruminations, my need to clarify what is obscure to me.

Topdog: Look! Your readers will see you as a senile, loquatious rambler.

Underdog: So, we are back again to my self versus my image. If a reader wants to look over my shoulder, he is welcome, even invited to peep. What's more, I have been more than once prodded to write my memories.

Topdog: Fritz, you are getting defensive.

Underdog: And you are wasting too much of my and the reader's time. So sit still and bide your time and let me keep you waiting. Let me be just as I am, and stop your chronic barking.

Topdog: O.K., but I'll be back again when you will least expect me and you need guidance from your brain: "Computer, please, direct me."



In and out the garbage pail Put I my creation, Be it lively, be it stale, Sadness or elation.

Joy and sorrow as I had Will be re-inspected; Jeeling sane and being mad, Taken or rejected.

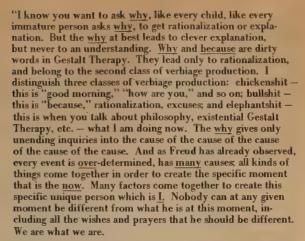
Junk and chaos, come to halt! 'Stead of wild confusion, Jorn a meaningful gestalt At my life's conclusion.



Gestalt Therapy, book (1), is the "bible" and is divided into two sections, the second of which is theoretical, abstract, and of considerably less interest to the nonprofessional who's interested in personal growth and contact. Part I, basically, is a series of experiments in contacting self and world; it is a series of trips designed to enrich internal and external contact; it is a partial map for discovery. People who attack "project," who will themselves into doing "good" things because they're supposed to be good things to do, can and probably will find Part I absurd, boring, mundane, unexciting, irrelevant and perhaps vacuous, i.e., like they probably react to most things in life. Part I is not for perusal, and it requires a kind of letting-go. To the extent someone tries to master it, they will lose it or, rather, never find it, and in the process will give themselves myopia, resentment and, at most, conversational tidbits. Part I is one of those goddamned things that stares at you bluntly and says, in effect, there is no right or wrong answer, or emotion, or state of being; that, in turn, leaves you, the reader, the doer, with no one to fight against, no one to resist and, equally pertinently, no one to suck from. Nothing will be laid on you. It's yours, as most of life can be, for whatever you want to get from it (i.e., put into it).



Gestalt Therapy Verbatim, and In And Out The Garbage Pail, on the other hand, appeals to the voyeur in us. (2) lays out the basic tenets and framework of Gestalt therapy, and then brings you into Perls' workshops and dreamwork seminars, by transcript and, with imagination, you can almost be there yourself, share fantasies, projections, and dreams, and watch other humans bring their inner stuff into the theater of reality, with its pain, shame, love, crises, ecstasies, blocks and rages. You'll watch people and their inner people do their thing all over Perls; and you'll also watch Perls, a disgustingly human human, do his thing all over them. Far out, weird-sounding stuff at first, but if you've been toying with the idea of getting into some Gestalt-oriented groups, it's as good a way to taste without really tasting as perhaps there might be short of watching a flick or, better yet, watching a group in action. It's nearly an experience, and that's saying a lot for a book.



These are the two legs upon which Gestalt Therapy walks:
now and how. The essence of the theory of Gestalt Therapy is in the understanding of these two words. Now covers all that exists. The past is no more, the future is not yet. Now includes the balance of being here, is experiencing, involvement, phenomenon, awareness. How covers everything that is structure, behavior, all that is actually going on — the ongoing process. All the rest is irrelevant — computing, apprehending, and so on."



In and Out the Garbage Pail
Perls, 1969.
\$4.00 *
from:
Real People Press
939 Carol Lane
Lafayette, California 94549

Gestalt Therapy
Perls, Hefferline, Goodman,
\$2.65 * 470 pp., 1951.
from:
Dell Publishing Co., Inc.
750 Third Avenue
New York 17, New York

Book (3) is the The Perls Story, a melange of autobiography, feelings, poetry, defenses of the theory, but mostly it's Fritz working on Fritz, the heaviest therapist-patient relationship there is, and that in itself is quite a trip. For throughout the book, as in his life, there is a continuing brawl, a real-life Tom and Jerry thing, as Perls splits himself into his two major parts even as he writes, and whom you root for, Topdog or Underdog, and whom you really really root for, will give you flashes into yourself if you'd care to stop and photograph them. Perls never quite makes it, never quite "cures" himself, whatever that means. The book ends quixotically, with parts of the Whole (Gestalt) never filled; Perls is still a pervert and schmuck to the end, hooked on his smoking, a bit uptight about what to do with chicks in his mid-seventies, still blocking himself, and digging his ego trips too. Though laden with crap, his garbage pail sparkles with gems of jewels, and Perls makes his invitation to us to participate in the scavenging a fine invitation after all, with no strings attached; somehow, his garbage pail feels a little bit like home.



PSYCHOSYNTHESIS: A MANUAL OF PRINCIPLES AND TECHNIQUES

Psychosynthesis is a collection of techniques originally designed for individual therapy. The theory that backs up the techniques is brief, sensible, and may or may not be of use at first. After one works with some of these techniques in classes the theory takes on a profundity that I thought was missing at first.

The exercises are varied, simple and should not be difficult to adapt to special needs. I have seen remarkable results with fifth and sixth grade children, college students and encounter-hardened adults. These are powerful and evocative techniques, however, and should not be treated as clever gimmicks drawn from the big book of trainers' tricks. Used sensitively they can expose difficulties and realizations that may deeply change the pattern of beliefs and values of an individual. So get a good feel for your own level of confidence and your own capacity to handle powerful insights in others before getting too heavily

The book is laid out so that one learns exercises for personal psychosynthesis (something akin in its goals to traditional psychotherapy) and then for spiritual psychosynthesis (development) opment of the higher, unified self).

I know of no other book which explores such powerful techniques without an overlay of metaphysical garbage or occult fanfare. A sensible addition to the tuned-in teacher's training.

If you want to know more — write the Psychosynthesis Research Foundation, Room 314, 527 Lexington Avenue, New York, New York 10017.

(Reviewed by James Fadiman)

"We describe the exercise as it is presented to a patient or

to a group:
'Let us imagine a rosebud, closed. Let us visualize its stem and leaves with the bud above. It appears green, because the sepals are closed, but at the very top a rose-colored point can be seen. Let us visualize this vividly, holding the image in the center of our consciousness

'Now begins a slow movement: the sepals start to separate little by little, turning their points outward and revealing the rose-hued petals, which are still closed. The sepals continue to



Psychosynthesis Assagioli, 323 pp., 1965 \$7.50 * from: Hobbs, Dorman & Co., Inc. 441 Lexington Avenue New York, N.Y. 10017

open until we can see the whole of the tender bud.

'The petals follow suit and slowly separate, until a perfect

fully-opened rose is seen.

- 'At this stage let us try to smell the perfume of this rose, inhaling its characteristic and unmistakable scent; so delicate, sweet and delicious. Let us smell it with delight. (It may be

sweet and delicious. Let us smell it with delight. (It may be recalled that religious language has frequently employed perfume as a symbol, e.g., "the odor of sanctity"; and incense is also used in many religious ceremonies).

'Let us now expand our visualization to include the whole rosebush, and imagine the life force that arises from the roots to the flower and originates the process of opening.

'Finally let us identify ourselves with the rose itself or, more precisely, let us "introject" it into ourselves. Symbolically we are this flower, this rose. The same life that animates the universe and has created the miracle of the rose is producing in us a like, even greater miracle—the awakening and development of our spiritual being and that which radiates from it.'

Through this exercise we can effectively foster the inner 'flowering.

"May I emphasize the fact that the elements and functions coming from the superconscious, such as aesthetic, ethical, religious experiences, intuition, states of mystical consciousness, are <u>factual</u>, are real in the pragmatic sense, . . . because they are <u>effective</u> (<u>wirkend</u>), producing changes in the inner and the outer world."

"A word of warning: Do not talk about this matter with others, not even with the laudable intention of inducing them to follow your example. Talking tends to disperse the energies needed and accumulated for action. Your purpose, if made known to others, easily provokes sceptical or cynical remarks which may inject doubt or discouragement. Work in silence. This cannot be stressed too much."

"It is opportune, at the outset, to stress the necessity of relating the different techniques to the over-all purpose of psychosynthesis, so that we retain this purpose clearly in mind when we apply the techniques — which are only tools, and as tools can be modified. What is important are the principles and the basic purpose of the entire endeavor. The basic purpose of psychosynthesis is to release or, let us say, help to release, the energies of the Self. Prior to this the purpose is to help integrate, to synthesize, the individual around the personal self, and then later to effect the synthesis between the personal ego and the Self. Therefore, all the techniques should be subordinated to this basic goal; they are not a static collection of tools, but can be used and modified at will by therapists and educators, provided they keep in mind the basic purpose of the therapy." the therapy

WAYS OF GROWTH – APPROACHES **TO EXPANDING AWARENESS**

A book of 19 articles relating to growth. Otto and Mann tried to choose representative articles from whatever valid approaches to personal and psychological growth they knew of: therapy, encounter groups, meditation, sensory awakening, etc., plus some others less well-known — "Extended Perception Through Photograph and Suggestion" by Minor White and "Breathing Therapy" by Magda Proskauer. In the process of choosing some questionable (to me, poor) writings were allowed in: notably Paul Bindrim's "Facilitating Peak Experi-

Any article or approach to growth is questionable/poor if (1) its ideas, exercises, methods have little relation to everyday life, substituting artificial environment for artificial environment; and (2) if it is so self-important as to develop its own terminology, psychological concepts and sometimes even cosmology, anthropology and more. For this is often to pad ideas that are good but not world shaking nor even sufficiently deep to qual-



Ways of Growth Otto and Mann, 227 pp., 1968

The Viking Press, Inc. 625 Madison Avenue New York, N.Y. 10022 ify as the door to a new discipline. Our language is insufficient in the words and ways of expressing the mechanisms and the experiencing of growth and awareness; but I weary of new word garbage, most of which I don't find to be useful or con-

This book, then, presents a whole spectrum of the growing number of Ways of Growth and it seems a sure bet that different people will be attracted by different articles. I found the first article, "Growing Awareness and the Awareness of Growth" by Sidney Jourard, to be well worth the price of the whole book. And it seems that the editors took care to intersperse the articles that glow among those that glitter.

"Growth is the dis-integration of one way of experiencing the world, followed by a re-organization of this experience, a re-organization that includes the new disclosure of the very to organization that includes the new disclosure of the property to organize the state of the property to organize the property the property to organize the property that the property the property that the property t The disorganization, or even shattering, of one way to experience the world, is brought on by new disclosures from the changing being of the world, disclosures that were always being transmitted, but were usually ignored."

"Enough of cows, and enough of Bossie. I am going to contend that when my concepts of myself, of you, of cars, of cows, trees and refrigerators, are shattered; and when I again face the world with a questioning attitude; when I face the being in question and let it disclose itself to me (it always has, but I paid it no attention after I conceptualized it); and when I re-form my concept on the basis of this newly received disclosure — then, I have grown. I will suspend my concepts when my projects in life (which depend on accurate concepts of reality for their fulfillment) are thwarted, when my predictions about how things will act or react prove wrong. Then, if tions about how things will act or react prove wrong. Then I adopt the attitude of "Let the world disclose itself to me," I will receive this disclosure and change my concepts, and I will have grown.

Sidney M. Jourard

Sensory awakening is a method for rebalancing the nonverbal aspects of the organism with the intellect, focusing attention on simple bodily functions. Some examples are relaxation, breathing, listening, movement and touch. These, used separately or in various combinations, help bring an individual back to his senses. By distributing attention throughout the organism rather than localizing it in the head, the person is

often able to make contact with his muscular tension, to learn how he creates it, and experience what it is like to gradually let go.

"Sensory awakening is a process that leads to heightened awareness, contact, and experience. Temporarily, at least, it allows the individual to let go of some of his defenses, experience the intensity of open experience and, to some extent, the potentialities that lie within. This process consists of different experiments designed to shift attention from symbolic or verbal interpretation to the actual. Too often people think they feel rather than feel. Ignoring primary processes, they freeze situations and themselves so that there is no sensory contact with the richness of each event.

Bernard Gunther

"Normally, when at rest one breathes more with the diaphragm, like the abdominal breathing of the infant. Complete chest breathing, where the ribs expand and lift, occurs only at times of maximum effort. It usually starts the moment we pull ourselves together for action, or if we focus our attention toward outer events. To put it in oversimplified terms: abdominal breathing goes with sleep, rest, inertia, letting things happen. Where it is disturbed, the inner life is disturbed; one is driven, unreceptive, and lives too intentionally. unreceptive, and lives too intentionally.

On the other hand, those who cannot open their chest cage are often anxious, inhibited, self-conscious, and tend toward feelings of inferiority. In between, there are endless variations and combinations, slightly different in rhythm in each individual. Where the pattern is reversed, the chest is lifted abnormally high, which means that only the auxiliary breathing muscles are used, those we need for maximum adaptation, as in the effort of mountain climbing. The diaphragm is excluded and becomes flabby, so the circulation is disturbed and the inner organs suffer. By relearning the use of the diaphragm, the warmth of returning circulation can be sensed in different areas of the body when one concentrates on them." body when one concentrates on them.

THE TEACHINGS OF GURDJIEFF

The references which follow introduce G. I. Gurdjieff, a Russian-born rascal-sage combining the powers of a stand-up comic, saint, and Turkish bazaar hustler whose teachings are vital for anyone interested in consciousness and education. Until recently Gurdjieff's work was known among a few mystery-mongering occultists and other less flamboyant spiritual people; most academic psychologists, philosophers and educators (unless obsessed with browsing in paperback bookstores) never heard his name mentioned. Now, about twenty years after his death, books by and about him abound and the number of "Gurdjieff Groups" led by his students and students of his students increases all the time. There are groups in many American cities and I know of active centers in Paris, Buenos Aires, and Mexico City.

What happened? In the United States this interest was and is part of the psychedelic drug explosion. Amidst all the chaos and debris were some people whose drug use included moments of exquisite ecstasy similar to the classical "mystical experience." The range of possibilities inherent in human consciousness far surpassed even their boldest expectations. However, a psychedelic drug is but a magician's trick; it can turn on the lights for a few moments and show you a place that you never thought existed - but it can't help you really live there.

Eventually those with resolve and determination to get beyond episodic subtlety turn to the teachings of Gurdjieff and related programs which have been concerned for millennia with the intentional enlargement and purification of human consciousness (e.g. Zen, Yoga, Sufism).

What are these teachings of Gurdjieff? Gurdjieff spent many years in Asia Minor collecting and realizing some of the well protected ancient teachings of Traditional Science (*The Encounter of Man and Nature* by Nasr; and the Journal *Studies in Comparative Religion*, both reviewed by Haven O'More in this issue will help any interested reader deepen his understanding of "Traditional Science.") Ouspensky refers to that aspect of this science employed by Gurdjieff as Evolutionary Psychology — techniques designed to help the student attain levels of consciousness on a higher plane than the "normal" waking state. In part this is accomplished by means of systematic training in self-observation which shows us: that most of our life is passed asleep on our feet reacting in mechanically predictable ways to the automatisms of others; that we on our feet reacting in mechanically predictable ways to the automatisms of others; that we talk as if we "do" things when in fact things "happen" to us; that we attribute unity to a stable self whereas there is only rampant multiplicity and constant flux; that we identify with a superficial, socially constructed personality while our essence atrophies from neglect; that our great-est suffering would be to let go of suffering, so we continue to poison ourselves each day with negative emotions; that we prefer an imagined self to a real one; and that it is a rare one among us who has developed his mind, emotions, and body in a full and coordinated way - and more!

Educators needn't use psychedelic drugs or be "spiritual" to benefit from contact with the set of materials cited in this review. Many of the reports by Gurdjieff's students, for example, provide detailed descriptions of this eccentric Traditional Master at work in his school in Paris during the 1920's. The "curriculum" included sacred dances, work in the kitchen, Turkish baths, music and manual labor. "Classes" were everywhere — he would prown around the grounds waiting for the proper moment to intervene in the routine activities of his students, using even a misdirected body motion or awkward gesture to work back to the general principles of his teaching. Students got what he thought they needed, not necessarily what they wanted. As a first rate performer he was able to act out different parts appropriately designed to shock a given pupil into awareness in a most economical manner. "Assignments" were also individually tailored — a very intellectual psychiatrist was not permitted to read for an entire year, physical labor being stressed instead.

In The Varieties of Religious Experience William James concluded

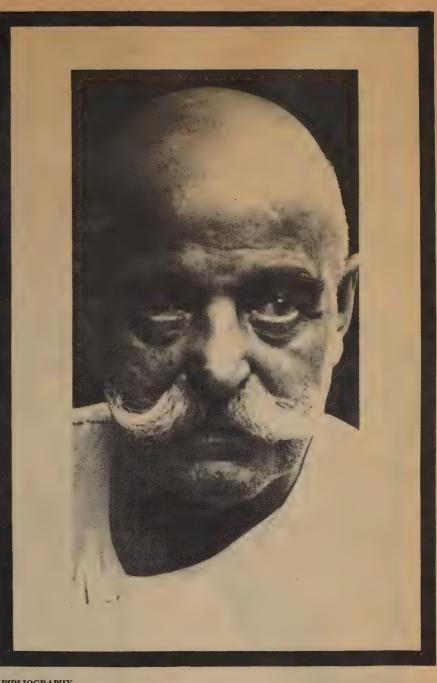
"that our normal waking consciousness, rational consciousness as we call it, is but one special type of consciousness, whilst all about it, parted from it by the filmiest of screens, there lie potential forms of consciousness entirely different. We may go through life without suspecting their existence, but apply the requisite stimulus, and at a touch they are there in all their completeness. . . . No account of the universe in its totality can be final which leaves these other forms of consciousness quite disregarded."

I believe that educators must now meditate on this statement because many of their students are already attempting to live it. Gurdjieff might help.

(Reviewed by Larry Rosenberg)



(NOTE: I urge the reader to try Gurdjieff's Meetings With Remarkable Men, Ouspensky's In Search of the Miraculous, Nott's Teachings of Gurdjieff and De Ropp's The Master Game before attempting to grasp All and Everything which is Gurdjieff's main work. Those who remain interested can use Psychological Commentaries by Nicoll as a constant reference work.)



BIBLIOGRAPHY

orks by Gurdjieff:
Meetings With Remarkable Men
N.Y.: E.P. Dutton & Co., 1969 (\$1.75) *
All and Everything N.Y.: E.P. Dutton & Co., 1950 (\$9.95) *
The Herald of Coming Good Paris: 1933 (no publisher listed) (\$3.50) *
orks About the Gurdjieff Teachings by his Students:
Lefort, Rafael, The Teachers of Gurdjieff London: Gollancz, 1967 (\$5,00)
Nicoll, Maurice, Psychological Commentaries on the Teaching of Gurdjieff and
Nott, C.S., <u>Teachings of Gurdjieff — The Journal of a Pupil</u> N.Y.: Samuel Weiser, 1962 (\$6.00) *
, Journey Through This World London: Routledge & Kegan Paul, 1969 (\$6,00) *
Ouspensky, P.D., In Search of the Miraculous
N.Y.: Harcourt, Brace & World, 1949 (\$2.45)
, The Psychology of Man's Possible Evolution N.Y.: Bantam Books, 1968 (\$0.95)
, The Fourth Way
N.Y.: Alfred A. Knopf, 1968 (\$7.95) *
ome Works Influenced by the Gurdjieff Teachings:
Bennett, J.G., Energies - Material, Vital, Cosmic London: Coombe Springs Press, 1964 (\$3.00)
, A Spiritual Psychology London: Hodder and Stoughton, 1964 (\$4.25)
Collin, Rodney, The Theory of Celestial Influence
London: Stuart & Watkins, 1968 (\$9.00) *
, The Theory of Conscious Harmony London: Stuart, 1958 (\$5.00)
, The Theory of Eternal Life London: Stuart & Watkins, 1968 (\$5.00) *
, The Mirror of Light London: Stuart & Watkins, 1959 (\$3.00) *
DeRopp, Robert S., The Master Game N.Y.: Delta Books, 1969 (\$1.95) *
Orage, On Love London: Janus Press, 1966 (\$2.50) *
. Essavs

London: Janus Press, 1965 (\$2.50) *

Ouspensky (five volumes)

reps

reps is reps - and that's all there is to it

what you learn from him doesn't fit into any organized system of teachings

reps is reps — reps books are reps, his picture poems are reps all his books help you to re-discover a joyful, healthy, centered

"thank you for your life" reps says
"thank you for reps life" i say



reps hiding

MUDDY ROAD

Tanzan and Ekido were once traveling together down a muddy road. A heavy rain was still falling.

Coming around a hend, they met a lovely girl in a silk kimono and sash, unable to cross the intersection.

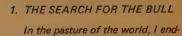
"Come on, girl," said Tanzan at once. Lifting her in his arms, he carried her over the mud.

Ekido did not speak again until that night when they reached a lodging temple. Then he no longer could restrain himself. "We monks don't go near females," he told Tanzan, "especially not young and lovely ones. It is dangerous. Why did you do that?"

"I left the girl there," said Tanzan. "Are you still carrying her?"

Zen Flesh, Zen Bones





lessly push aside the tall grasses in search of the bull. Following unnamed rivers, lost up-on the interpenetrating paths of distant mountains,

My strength failing and my vitality exhausted, I cannot find the

bull. I only hear the locusts chirring through the forest at night.

Comment: The bull never has been lost. What need is there to search?
Only because of separation from my true nature, I fail to find him. In the confusion of the senses I lose even his tracks. Far from home, I see many crossroads, but which way is the right one I know not. Greed and fear, good and bad, entangle me.

Zen Flesh, Zen Bones



the rain 4es the rain

BOOKS BY REPS *

Ask a Potato (American Fabrics, \$1.00). Gold/and Fish Signatures (Tuttle, \$2.50). Square Sun, Square Moon (Tuttle, \$2.50). Unwrinkling Plays (Tuttle, \$2.95). Zen Flesh, Zen Bones (Tuttle, \$3.25 hardback; Doubleday, \$0.95 paperback). Zen Telegrams (Tuttle, \$2.50). No Need to Kill: 10 Ways to Meditate (Walker/ Weatherhill, \$3.50).

Addresses: American Fabrics Magazine, 24 East 38th Street, New York City 10016.

Doubleday & Co., Inc., Garden City, New York 11530. Charles E. Tuttle Co., Inc., Rutland, Vermont 05701. Walker & Co., 720 5th Avenue, New York City 10019.

THE ENCOUNTER OF MAN AND NATURE

How does it stand between man and Nature?

Asking this question is the same as asking, "How does it stand with man in the last third of the 20th century?" I in essence there can be no division between man and Nature. Seyyed Hossein Nasr hints at this in his subtitle to this new work, first delivered in the form of lectures under the spon sorship of the Rockefeller Foundation at the University of Chicago during May 1966.

Yes, how does it stand with man? The evidence, both internal and external, is too overwhelming for complete description. "Everyone," writes Nasr in his introduction, "talks today of the danger of war, overpopulation or the pollution of air and water. But usually the same people who discern these obvious problems speak of the necessity of further 'development', or war against 'human misery stemming from conditions imposed by terrestrial existence itself. In other words they wish to remove the problems brought about by the destruction of the equilibrium between man and nature through further conquest and domination of nature. Few would be willing to admit that the acutest social and technical problems facing mankind today come not from so-called 'under development' but from 'over-development'. Few are willing to look reality in the face and accept the fact that there is no peace possible in human society as long as the attutude toward nature and the whole natural environment if one based on aggression and war. Furthermore, perhaps not all realize that in order to gain this peace with nature there must be peace with the spiritual order. To be at peace with the Earth one must be at peace with Heaven.

To judge from man's behavior during what we know of the brief record of recorded history, man does not want peace: with himself, his fellow men, Earth or Heaven. Man is a composite. One part of himself seeks to destroy himself, the other part would heal what the one would destroy. Rather than come to terms with himself man will go to any lengths.' The scientific explosion in the modern sense is merely the most recent (and perhaps ultimately most use less) of man's many attempts to avoid the Real. Man deludes himself into thinking that his most acute problem is quantitative; to deal with it he devises ever more far out measuring devices. Man endlessly divides nature. Put another way, he endlessly divides himself. For this he either uses instrumentation (very crude regardless of what we call the "level of sophistication," since at best merely an extension of man's own sensorium) or mathematical analysis (more subtle than any instrumentation since it derives from mentation). Man forgets, however, that either instrumentation or mathematical analysis are always in the realm of the quantitative no matter how far they are carried.

But what is the danger of such endeavor for man carried on, as it is today, with a total commitment? Does he not fulfill his glorious destiny, according to modern evolutionary theory, by rising ever higher and higher? (Another way of saying becoming what is considered more scientifically sophisticated. A "sophistication" it should be understood viewed strictly from the extremely limited modern view point.) The key word to use today to indite either a politician or scientist is "progress." Merely say, "He is against progress." What is really being said is: he is against evolution and the scientific "spirit." Progress, modern man's supreme myth: "gradual betterment; esp: the progressive development of mankind" (Webster). The 20th century man en masses (and what could better characterize the 20th century than calling it "the rise and domination of the masses?") would never vote for a politician who opposed "progress." The politician would be opposing man himself the many reason (if you will pardon the word "reason' applied to mass man). Perhaps the scientist who really understands this cannot function exclusively as a scientist,

Why, though? The answer, a complex one, is investigated by Nasr in The Encounter of Man and Nature. Put simply, evolutionist and progress concepts lead man further and further away from his real purpose for being. Man exists to taste the nature of the Real with full awareness. He awakes to the Real when he sees into his own true nature (=moksa).
Fa-tsang commenting on the Hua-yen doctrine states with clarity and precision this fundamental issue: "Because senclarity and precision this fundamental issue: "Because sentient beings are deluded they think they should discard the illusory and enter the Real. But once enlightenment (chienhsing, moksa) is attained, the illusory is itself the Real. The is no other Real to enter." Anything that removes man from his reason for being, or any means he uses to forget it and superimpose between himself and Being itself renders his existence, and that of the race, useless. The natural environment directly reflects this individual and collective

Seyyed Hossein Nasr's book is not just another piece of flotsam in the flood of "solutions" for 20th century man proposed by the scientific and religious communities. If it were, it would have only verbal value — which is to say, none. Nasr examines man's problem at its cause, which by its very nature can only be an inner one. Man's real problem is himself. When this is recognized the most important question becomes: what can man do himself to resolve his problem? For those who are willing to listen and understand Nasr gives an answer, but strictly from the standpoint of traditional science. This makes it all the more valuable for it is not based on any man's opinion or reason but on a unitive and illuminative knowledge rooted outside the limi-

THE **ENCOUNTER** OF MAN AND **NATURE**

The Encounter of Man and Nature Nasr, 151 pp., 1968 \$5.00 from: George Allen and Unwin Ruskin House Ltd. Museum Street London, England

AKROASIS, THEORY OF WORLD HARMONICS

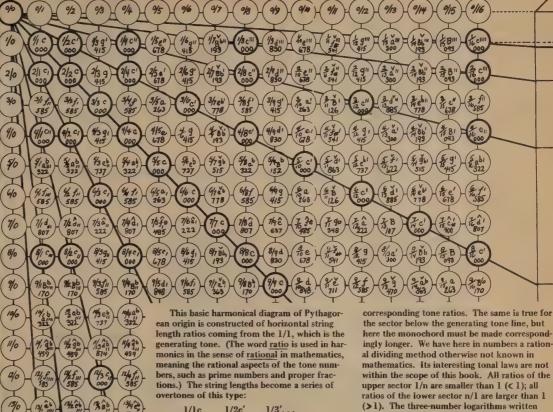
The title of this book refers to hearing, a subject that seems strange, but Akroasis is not about the perceptions of the ear, but rather about the harmony of the universe, something to

Kayser describes his theory as World Harmonics, not to be confused with the "harmonics" of chords and string fingerings; his harmonics are a universal kind, reviving the truths of measure, the order of things, and value, the laws of things. This harmony is described in a letter from Haven O'More:

"Diodorus Siculus writing in the 1st century A.D. said, The whole manner of life of Egyptians was so evenly ordered that it would appear as though it had been arranged according to rules of health by a learned physician rather than by a law-giver.' Contrast this with the modern world: it lives according to 'rules' given by an insane man!'

Akroasis rediscovers principles of age-old truths and joins the new to them in a natural continuum. Kayser makes applica-tions of his method of harmonics to many fields of contemporary significance: geology, botany, architecture, painting, poetry, Gestalt mathematics, philosophy and religion.

1/2



1/1c 1/2c' 1/3'... 2/1c' 2/2c 2/3g . . . 3/3c . . . 3/1f,, 3/2f,

The vertical "row of undertones" appears The vertical "row of undertones" appears automatically as a product of the ratios of string lengths. The diagram therefore consists of the crossing of overtones and undertones, first in pure major and minor, later in narrowing and fainter intervals. If one connects the identical tone-values (shown here in bold face) concerning the C values only, all these lines refer to a point outside the system which we, in accordance with the logic of ratios, designate with 0/0. The same procedure is valid for all other tone-values as well. The other imaginary ratios of values as well. The other imaginary ratios of the uppermost horizontal row and the first ver tical row to the left evolve with the same logic. These "identity rays" show on the string of the monochord the exact distance as shown in the

here the monochord must be made correspond ingly longer. We have here in numbers a rational dividing method otherwise not known in mathematics. Its interesting tonal laws are not within the scope of this book. All ratios of the upper sector 1/n are smaller than 1 (< 1); all ratios of the lower sector n/1 are larger than 1 (>1). The three-number logarithms written below the tone values are the logarithms of the string lengths on base 2; they represent the distribution of all tones within one octave between c and 1000 as we hear them.

A strangely prophetic description of the spiritual content of the diagram is found in the following poem by Friedrich Rückert, strange because Rückert could not have known the diagram since it was first published in the form of the Lambdoma by A. von Thimus in 1868.

"As rays go toward the earth from the sun

So a ray goes from God to each thing's heart

On this ray the thing hangs together with God, And through it feels its origin from

God.

No such ray goes sideways from thing to thing,
Only many confusing flickerings

You cannot know the thing by these flickering lights,
A dark separating wall will always be between.
You must ascend to God on your own

ray, And on the thing's ray return again. Then you see it as it is, not as it seems When you yourself are in concord with God."

tations and restrictions of determined manifestation in

STRING LENGT

14/0

In another but related connection Frithjof Schuon lays the problem bare in <u>Les Stations de la Sagesse</u> (available in <u>English as Stations of Wisdom</u>, John Murry, London, 1961). "In reality, the <u>philosophia perennis</u>, actualised in the West, though on different levels, by Plato, Aristotle, Plotinus, the Fathers and Scholastics, constitutes a 'definitive' intellectual heritage, and the great problem of our times is not to replace them with something better — for this something could not exist according to the point of view in question here — but to return to the sources, both around us and within us, and to examine all the data of contemporary life in the light of the one, timeless

Nasr does return to the sources: "Let us return."

The Encounter of Man and Nature is a seminal book, and one that should be read and pondered by every 20th century man properly and first concerned with his own "salvation. For if he is wise he knows until he has saved himself he is not fit to save others. "This is called 'knowing the root,' this is called 'the perfection of knowledge

(Suggested and Reviewed by Haven O'More)

Akroasis

Kayser, 177 pp., 1970 \$5.95 from:

Plowshare Press Ind Post Office Box 2252 Boston, Massachusetts 02107



THROUGH AN EASTERN WINDOW

Huber, an American psychotherapist, writes of his experience in Japan and Burma. In Japan he mediated for a five-day period with a Zen master and experienced kensho (enlightenment). In Burma he began a course in another type of meditation but decided to leave the meditation center and not complete the course.

The book is rare because Huber writes, honestly and without exaggeration, of his own experience: feelings, thoughts and emotions. Most of what he encountered was new to him. He clearly accounts his experiences, and trusts that such an account is far more valuable than intellectualizing or other forms of bullshit. He writes only what he knows in himself — so reading the book gave me the same energy as talking with someone who speaks honestly about an experience important to him, who trusts himself and his perceptions of the experience: that is, I feel that I have grown.

"I wish I could repeat verbatim what the master said, but I could not write it down. I was too busy listening. The essence of the conversation, however, is clear in my mind. He said that in the five days the attempt would be to gain a 'glimpse into one's own nature.' We live 'conditionally' through our 'conditional nature.' Our attempt in the five days would be to see our 'unconditional nature.' He proudly handed us a small booklet written in Japanese by him and translated into English. We were to read it later.

"As the master spoke, the other Westerner interrupted intermittently and attempted to relate or compare the master's comments to a philosophical or psychological idea of his own. 'I see,' he would say, 'that's like what I teach,' or, 'Oh yes, we do the same thing.' The master would nod when the Westerner spoke, and then he would proceed. I was irritated; I did not want to hear a discussion. I wanted only to hear the master speak and wanted no comparisons or interpretations."

"Zazen over, we went downstairs and the Roshi spoke to the interpreter, my roommate, and me. This happened periodically; I assumed he was giving us part of what he gave the Japanese students at another time. During these infrequent and short conversations he spoke about Zen.

"To his statements I could give only highly personal associations, but I was never asked to state them. Even if we could have communicated in a common language, I do not believe he would have pursued my associations to help me analyze them. This was left for me to do as I chose. He and I were in no way in this thing together, as therapist and patient are apt to be. We were mutually sharing neither a review of my daily activities and thoughts nor a recounting of my past. He pointed to vague goals the content of which I would have to fill in for myself. He instructed me in meditation; he contributed to my comfort and the elimination of distraction. The rest was up to

"Much later in the afternoon I had a striking insight. In the middle of my sound-listening periods I realized that no matter what thought or feeling I had, it passed on. It either never recurred or never recurred in quite the same way. I realized that nothing will ever come again as it comes to me at any one moment. Nothing exists but what exists now.

"Later I recognized this as one of the cardinal Buddhist principles — the impermanence of all things, the constancy of change.

"These were not totally new thoughts to me, but in the intensity of observation of what went through my mind I experienced the idea as I never had before. At each moment only sound, then only listening, then breathing, then sound, then listening. Then distraction — a face, a thought, a feeling, an idea. Anger, frustration. Would the distraction last? That was the question. Will it last? And then it struck me. Will what last? Was this not the question I was always asking myself? Will this pleasure last? This anxiety? What can I do to make it go away? Always the avoidance of what is going on at the present moment. Always the concern about the future, tomorrow, next year, the next moment. What next moment?"

Through an
Eastern Window
Jack Huber, 118 pp., 1965
\$0.95 *
from:
Bantam Books, Inc.
271 Madison Avenue
New York, New York 10016





Memories, Dreams,
Reflections
C.G. Jung, 430 pp., 1963
\$2.95
from:
Vintage Books
457 Madison Avenue
New York, New York 10022

MEMORIES, DREAMS, REFLECTIONS

Jung's autobiography tells us how he did it. Perhaps what he wishes to give us is the faith that we too can come to understand ourselves: that it is the highest and most significant of all natural processes, but that it is a natural process (he calls it individuation). Through this process we become whole, and the world, of which we are a microcosm, is then seen in its in-

individuation). Through this process we become whole, and the world, of which we are a microcosm, is then seen in its innate wholeness. This demands honesty and courage and trust in our fates. Jung by being an example, that is by having struggled against self-deception and the doubt which tried to make him deny his fate, helps us to accept our most precious fates. Furthermore, by being a scientist he was able to objectify his own self discovery through experiential evidence in others: patients, myths, religion, alchemy, etc. He was a pathfinder within the realm of the psyche. For a part of our journey, his paths may be of great help.

Jung's attitude toward methods and his patients is also an important example. Any technique was applied first on himself and never dogmatically on anyone else. Dogma is the antithesis of openness, and openness is necessary for keeping on the ever evolving path toward self-realization. It was Freud's dogmatism which forced Jung to part ways with him. By refusing to fall prey to his own pre-conceptions, Jung could let his patients come to their own understanding about their dreams and themselves. Openness allowed him to learn much from them.

After his split with Freud, Jung was thrown back into himself. In the chapter "Confrontation with the Unconscious" he tells how he was forced to find his own personal myth. His unconscious made huge demands on him including that he return to his childhood homes in order to remember what he had forgotten since then. This was a frightening period but he knew it was his task to learn from it. When he emerged from this troubled time, he had discovered his key. All his works are an explanation and an elaboration of what he found in himself during this period of crisis.

His works are discussed briefly in the autobiography. Footnotes are used to point out the appropriate work if we wish to look at a summarized idea in depth. At the end of the autobiography his complete works are listed. The text also includes a very useful glossary of terms with quotes from many of his works. But by seeing his life, we too see his work. They are the same. Thus his autobiography is a fine microcosm of Jungian Psychology.

Memories, Dreams, Reflections is a book about education. Real education for Jung is self-education and self-discovery. Each person must accept responsibility for his own fate. The authority is within, but it is much deeper than the ego. If we listen within closely and with respect (but not without questioning, since it is understanding not faith that will lead to our salvations), we can hear our deeper self speak to us.

(Reviewed by Clif Trolin)

Bronze Oldies

How Children Fail
Holt, 181 pp., 1964
\$0.95
*from:
Dell Publishing Company
750 Third Avenue
New York, New York

HOW CHILDREN FAIL: Holt sees things that most teachers miss; his writing can sensitize us to look more closely and lovingly at the human beings around us.

Education and Ecstasy
Leonard, 239 pp., 1968
\$2.25
from:
Delta Books
750 Third Avenue
New York, New York 10017

Education and Ecstasy is a good book for times when school seems to be closing in on you, a reminder that education should and can be exciting.

Radical School Reform
Ed. Roland and Beatrice Gross
350 pp., 1969
\$7.95
from:
Simon & Schuster
630 Fifth Avenue
New York, New York 10020

All of the popular education reformers are here in one book: Kohl, Holt, Leonard, Ashton-Warner, and others.

Teacher

Ashton-Warner, 224 pp.,
1967, \$1.95

*
from:
Simon and Schuster
630 Fifth Avenue
New York, New York 10020

Through Silvia Ashton-Warner's organic reading approach,
children develop self-identity by learning to read only with
the words they know and have meaning for them.

Summerhill
Neill, 392 pp., 1960
\$1.95
*from:
Hart Publishing Company
510 Sixth Avenue
New York, New York 10011

Summerhill is the story of the Granddaddy of Free Schools by the Granddaddy who did it.

Teaching as a
Subversive Activity
Postman and Weingartner
219 pp., 1969
\$5.95
from: *
Delacorte Press
750 Third Avenue
New York, New York 10017

Teaching as a Subversive Activity suggests a cleansing of the crap in today's school teaching. An inquiry based, learning how to learn approach is the only subject that can prepare for the future.

Open Classroom
Kohl, 116 pp., 1969
\$1.65
from: *
Viking Press
625 Madison Avenue
New York, New York 10022

Whether a classroom is structured or unstructured seems not the point; whether it is open or closed is the issue. The *Open Classroom* is a practical handbook for frustrated public school teachers.

WHOLE EARTH CATALOG

The Whole Earth Catalog is the grand-daddy of the new field of literature referred to as "Late 20th Century Catalogue". Using the example of early nineteen hundreds Sears Catalog, the Whole Earth has returned information packed pages, low cost printing and binding, and mail-order availability as the basis for a catalog which shows people what useful tools are available to them.

The Whole Earth Catalog has proven itself to be a useful tool and good nuts and bolts item for the productive part of the alternative culture, and a link with the wishful and vicarious part of the middle aged culture. It is in fact the best of its kind that we've seen. As that great journal of the emerging underground, Vogue Magazine, says: "The Whole Earth Catalog is all answers, often zany and unorthodox, for tomorrow."

Having sired by example such notables as Mother Earth News, Domebook One, and that new young whipper-snapper, Big Rock Candy Mountain, the Whole Earth Catalog will be put out to pasture in the spring of 1971, leaving cavernous footprints, which nonetheless will be hard to follow.

Whole Earth Catalog Subscription \$8.00 a year;

\$3.00 for single issue from: Whole Earth Catalog

558 Santa Cruz Avenue Menio Park, California 94025

Portola Institute Tao Teh King

Reviewing the Tao is like reviewing the Bible. As soon as you presume, it just giggles and rains on you. Nevermind.

The Tao Teh King is a very old book (500 B.C. is one date) written by a legend named Lao Tzu. It describes how the universe is and makes an excellent case for harmony as the only survival technique that works. This translation by Archie Bahm is straightforward.

(For other translations, see p. 80)

[Suggested by Jack Loeffler]

Tao Teh King Lao Tzu; Archie Bahm ? B.C., 1958; 126 pp. \$.85 postpaid

Frederick Ungar Publishing (250 Park Avenue South New York, N. Y. 10003

or WHOLE EARTH CATALOG



First Steps in Winemaking 1960; 160 pp.

\$1.95 postpaid

Semplex of USA Box 12276 Minneapolis, Minn. 55412

WHOLE EARTH CATALOG

The Canadian Department of National Health and Welfare puts out a free simple book on sanitation, intended for remote northern areas. It has good clear diagrams of septic tanks, privies, and chemical toilets. There is also information on heating, lighting, water supply, and

* Sanitation Manual for Isolated Regions 1967; 64 pp.

free

Department of National Health and Welfare Ottowa, Ontario, CANADA

The Rise of the West

One humanity, one history, one fat little book. Some familiarity with world history will not help you to avoid mistakes, but it may help you recognize them and thus move on to more original ones.

[Suggested by Jib Fowles]



W. H. McNEILL



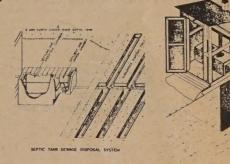
The Rise of the West W. H. McNeill 1963; 896 pp

\$1.65 postpaid

The New American Library, Inc. 1301 Avenue of the Americas New York, N. Y. 10019

or WHOLE EARTH CATALOG





zip-adee do da, zip adee-ay

BIG ROCK CANDY MOUNTAIN

When we first looked at this "Resources for our Education" catalog, we leafed through it and came across reviews about Minor White's photography book, cardboard carpentry, Ward's and Edmund's Scientific catalogs, Filmmaking, and The Art of the Puppet, we thought then it was maybe a catalog on crafts.

Next time we looked through it, we encountered Good Medicine, Syllabus of Survival, Outward Bound, and Meatball, we thought it might be a catalog for nature enthusiasts.

Next time, we went through and happened on Krishnamurti, Tao Te Ching, Hatha Yoga, Sufis, Gurdjieff, and Zip-adee do da, zip-adee-ay, and it seemed like an esoteric potpourri of favorite books by spiritual freaks. And as Virdone says:

"If you're gonna put in all your favorite books, then call it 'Our Favorite Books' and not 'Big Rock Candy Mountain'."

We've been trying still to get an idea of what the whole catalog is about, and so first tracked down the name. As members of the younger generation may not know, it's an old hobo song:

'Ohhhh,' the buzzing of the bees In the cigarette trees
And the sodywater fountain
And the lemonade springs Where the bluebird sings On the big rock candy mountain. . ."

Also, as most people may not know, Big Rock seems to have been the name of a short-lived commune in which a couple of the catalog staff members participated.

However, back to the catalog: people who put it out evidently believe that all the items in the catalog form a gestalt of a more human and natural approach to education. This idea is hammered home not-so-subtly in many of the reviews. But it seems difficult to ascertain also who the catalog is for, what group it's aimed towards: not only for public school teachers, nor only free school people, nor only mothers, nor spiritualists, hippies, or what-have-you. As Sam the bikey once lifted from our friend Anthony: "Somethin' for everyone."

The catalog emphatically states that it is concentrating on and is about education, thus setting it apart from the now fairly-well-known Whole Earth Catalog, which has a more general approach. (Big Rock seems patterned after the Whole Earth Catalog in general format and in some other ways, but we think its contents justify its existence as a separate publication. This will have to be substantiated further in forthcoming issues.) The people who did Big Rock seem to believe education has been wrongly conceptualized in terms of teaching; they feel education has more to do with learning.



Big Rock Candy Mountain scription \$8.00 a year; \$4.00 for single issue

Big Rock Candy Mountain Portola Institute 1115 Merrill Street Menlo Park, California 94025

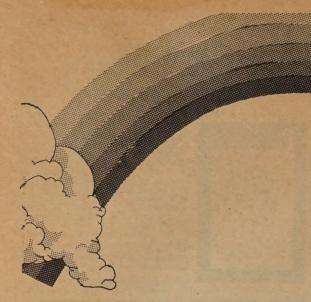
"I AM A MONSTER.
I AM A BIG MONSTER.
I AM A MONSTER MONSTER. BUT I DON'T WANT TO BE A MONSTER MONSTER." (p. 4)



from Man: A Course of Study

"A man goes to knowledge as he goes to war, wide-awake, with fear, with respect and with absolute assurance. Going to knowledge or going to war in any other manner is a mistake. . . " (p.6)

"However, back to the catalog: people who put it out evidently believe that all the items in the catalog form a gestalt of a more human and natural approach to education." (p. 55)



RIFF: UR

The people who put together this issue are:

Sam Yanes Richie Gordon Mark Horowitz **Linda Williams Diana Chambers** V. McNeil

Phyllis Grossman Florence Bradford Sim Vander Ryn **Guy Chambers** Jim Campe

Editor

Associate Editor; Layout Associate Editor; Layout Associate Editor; Photography

Associate Editor; Research Composer

Contributing Editors

with:

John Friedman Virdone **Ann Mino** Sally Daniels **Buck Dant Paul Butler**

Pamela Dant Jim Robertson Frank Armbruster Dick Raymond and the entire Ortega Park staff

MONEY MATTERS:*

ESTIMATED PRODUCTION COSTS (6 weeks)*

Salaries	\$2860.00
Composer	225.00
Camera Rental	50.00
Film and Half Tones	410.00
Garage	50.00
Printing	3200.00
Mailing	300.00
Telephone	40.00
Reviews	300.00
Petty Cash — Other Goodies	200.00
Cover	50.00
	\$7685.00

*This does not include 6 months of research. We are printing 10,000 copies for a first run. Therefore our unit cost is 77¢. The unit cost will be significantly lower if we end up printing a second run of 10,000.

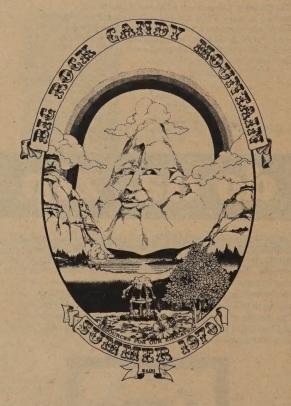
[Mon-ey Matters; not Money Mat-ters]

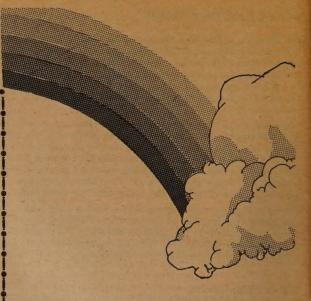
MEATBALL

The BIG ROCK CANDY MOUNTAIN will promote products we think aid in personal education, but the Catalog is under no obligation to the producers of those products. Publishers, manufacturers, and even the little guy can't buy space in the Catalog. If the item is good, we'll find it or someone will tell us about it. We do, however, gladly accept review and sample

The staff and readers of the BIG ROCK CANDY MOUNTAIN determine its content. We have fantasies of what the Catalog looks like and how it will grow, but feedback is necessary to feed those fantasies, and at the same time keep our feet on the ground. Some of us on the staff have been teachers and some of us have not. A couple of us have taught in free schools and some in public schools. None of us at the present time are teaching and we have no kids on the staff. BIG ROCK is dependent on readers of the Catalog and users of the materials for reviews and suggestions on items listed and for new input on items to list.

We are a vehicle for communication among people concerned with education, both personal and public. Materials, books and ideas have no inherent power by themselves. People, using, experiencing and learning with these aids, give them meaning. Techniques, work-in-progress, classroom and personal applications and evaluations which you or we want to communicate to others appear in the four smaller informal Catalogs.





DISTRIBUTION

Distribution of BIG ROCK CANDY MOUNTAIN is being handled by BOOK PEOPLE in Berkeley. All retail distribution is processed through BOOK PEOPLE; please do not direct your order to BIG ROCK CANDY MOUNTAIN.

> **BOOK PEOPLE** 2010 Seventh Street Berkeley, California 94710 Phone: (415) 549-3033

Wholesale and library distribution can be worked out directly through BIG ROCK CANDY MOUNTAIN in Menio Park. Terms for wholesale distribution are 50% for 100 copies or

BOOK ORDERS:

Orders should be addressed to the suppliers listed with the item. (Be sure to add sales tax if the transaction is within your state.) The items marked ** can be ordered by mail from BIG ROCK CANDY MOUNTAIN. Mail-orders are being handled for us by a near-by bookstore which will stock the books and take the profit or the loss.

Send Check or Money Order to:

BIG ROCK CANDY MOUNTAIN MAIL ORDER 1115 Merrill Street Menlo Park, California 94025

Add 25¢ for each \$5 worth of purchase to cover handling and

(California orders add 5% sales tax.)

SUBSCRIPTIONS:

Subscriptions to BIG ROCK CANDY MOUNTAIN cost \$8.00 per year and include two big Catalogs and four smaller informal ones. Retaining subscriptions are \$25 for one year, sustaining subscriptions are \$100+. Portola Institute, Inc. is a tax-exempt, non-profit educational corporation. Retaining and sustaining subscribers may deduct the difference between the normal subscription rate - \$25 (\$17 tax deductible), \$100 (\$92 tax de-

Send to: BIG ROCK CANDY MOUNTAIN PORTOLA INSTITUTE, Inc. 1115 Merrill Street Menlo Park CA 94025	I am enclosing \$payment for: Summer 1970 Catalogs (single copy \$4.00/ 5 or more \$3.00 ea.) Winter 1970 Catalogs 1-year Subscription (Summer & Winter issues plus 4 informal smaller issues \$8.00) Retaining Subscription \$25.00 Sustaining Subscription \$100.00 or more
	Zip

PORTOLA INSTITUTE

Portola Institute was established in 1966 as a non-profit, tax-exempt corporation to encourage, organize, and conduct educational projects. For specific projects, proposals are made to individuals, private foundations, and public agencies for support.

Because the Institute is a small, private organization with no need to produce profits or guaranteed success, it can incubate new and unusual projects. There is little central administration; each project independently charts its own course.

The Institute workings are difficult to describe since the framework varies with the nature of the projects. With the flexible structure of Portola Institute, a wide variety of projects dealing with innovative education can be created as people with ideas are able to interest people with funds. New projects are always being considered, both within the existing divisions and programs, and within as yet unexplored realms of the learning experience.

PORTOLA

DICK RAYMOND is president of Portola Institute. He claims to do very little but is far too modest. His help was invaluable to the BIG ROCK CANDY MOUNTAIN We think a lot of him.



MUSIC RESOURCES PROGRAM

An exploration of innovational approaches to music composition and music teaching at all age levels. The program includes non-rote instructional techniques, and manual devices to aid in composition, learning and performance. The director, Peter Sessions, is currently working on a self-instruction book for the composition of music, using a new learning device, The Bead

Music Resources 540 Santa Cruz Avenue Menlo Park, California 94025



SCRIPPS OFF CAMPUS PROJECT CENTER

A place for high school age people to get assistance, financially and materially, on projects of their choice. The center is independent of the school system; schools may or may not give credit to participating students; students arrange their own releases from school. The projects are limited in scope only by imagination and cost. The students provide the direction of the center and influence its growth in their consideration of new projects. The Scripps Off Campus Project Center, in addition to individual projects has a video tape workshop and wilderness school program. Scripps has recently moved to larger derness school program. Scripps has recently moved to larger quarters at:

Scripps Off Campus Project Center 851 Shasta Street Redwood City, California



An evaluation and access source, providing the user with information about tools - both books and hardware - which enable him to shape his environment, external and internal, as well as to begin to realize his fantasies. The Truck Store publishes the Whole Earth Catalog twice annually along with four supplements; it lists and evaluates materials and processes and provides the user with a mail order route to the desired source. At 558 Santa Cruz Avenue in Menlo Park, a permanent store sells most of the books and a few of the tools, and provides a base for the exchange of information via the mails. for the exchange of information via the mails.

Whole Earth Truck Store / Catalog 558 Santa Cruz Avenue Menlo Park, California 94025



ORTEGA PARK TEACHERS LABORATORY

ORTEGA PARK TEACHERS LABORATORY

A Laboratory for learners of all ages — teachers, administrators, parents, studetns, and concerned laymen — offering an opportunity to observe, explore, and discuss the teaching-learning process, away from the demands adn structures of the school system. The Teachers Laboratory conducts special workshops, seminars, and conferences for school districts or other groups, as well as holding regularly scheduled programs open to all members. The major concern of the Laboratory is with the theories and beliefs that shape the perceptions and devisions of educators and children in the schools. Necessary changes in methods, curricula, or materials grow from a better understanding of the processes of learning and communication. The Laboratory publishes a monthly newsletter, as well as occasional papers and reports. Ortega is situated in the coast mountain range, South of San Francisco, on Skyline Boulevard, in Woodside, California.

Ortega Park Teachers Laboratory 540 Santa Cruz Avenue Menlo Park, California 94025

